CPCco
Central Plateau
Cleanup Company
an Amentum, Fluor, Atkins LLC

STATEMENT OF WORK
FOR
CONSTRUCTION

Requisition #: 347882

Title:
105KE SAFE STORAGE ENCLOSURE (SSE) CONSTRUCTION – STRUCTURE AND INTERNAL WORK

Revision Number: 0

Date: 03/03/2021

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Division 1, "General Requirements" are part of the CPCCo Construction Statement of Work.

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PART 1 – GENERAL

1.1 INTRODUCTION / BACKGROUND

As a prime contractor to the U.S. Department of Energy (DOE), Central Plateau Cleanup Company (CPCCo) is focusing on the safe, environmental cleanup of the Central Plateau of DOE's Hanford Site. CPCCo's scope of work includes treatment and disposal of various radioactive waste streams and groundwater, management of spent nuclear fuel, disposal or disposition of nuclear materials and non-reactor nuclear facilities, and environmental remediation activities currently funded through DOE's Office of Environmental Management.

This Statement of Work (SOW) identifies the Contractor's scope as it relates to the fabrication and construction of the 105KE Reactor Safe Storage Enclosure (SSE) associated with the 105KE Interim Safe Storage (ISS) Project at the 100K Area of the Hanford Site.

1.2 DESCRIPTION OF WORK - GENERAL

The Contractor shall provide, fabricate, and construct the freestanding 105KE Reactor SSE over the existing 105KE Reactor building. The primary scope includes all activities associated with construction of the SSE, including but not limited to installation of the stair tower, SSE vestibule, electrical distribution, lighting, hand railing, guard railing, and inspection support equipment at the 105KE Reactor building, as documented in the SSE design, Exhibit 1. This scope also includes preparing the 105KE building for long term Interim Safe Storage (ISS), including but not limited to removal of exterior obstructions on the building and lowering elevator counterweights. Exhibit 2 provides a functional description of the project outcome.

The earthwork, limited demolition/processing/disposal of contaminated concrete, and installation of the SSE foundation to include all embeds, the grade beam, vestibule foundation, concrete walkways, and crushed gravel walkways, and installation of the subgrade exhaust duct will be performed under another, separately awarded contract.

The Contractor shall provide technically qualified person(s) to perform the tasks described in this SOW. The Contractor will work as part of an integrated project team under the general supervision of CPCCo. Unless otherwise approved, the Contractor shall work in accordance with CPCCo contract requirements, operating policies and procedures and shall be responsible for execution of the work in accordance with the quality standards and requirements specified for assigned project and facility.

SECTION 01010
SUMMARY OF WORK

1.2.1 Work is in the 100K Area of the Hanford Site and is located approximately 40 road miles north of Richland, Washington.

1.2.2 Work scope consists of other specified tasks outlined in this SOW to allow completion of the ISS actions at the 105KE building.

1.3 DESCRIPTION OF WORK – SPECIFIC

The Contractor shall delineate and maintain the pathways and laydown areas for the overall project scope.

The Contractor shall construct the 105KE SSE, which will be a freestanding enclosure structure over the existing 105KE Reactor building. See Exhibit 3 for photos of the remaining 105KE building after partial demolition was completed.

For reference, the SSE will consist of a structural steel framing system with metal roofing and siding panels, and a reinforced concrete grade beam foundation system atop a Contractor installed structural fill base (installed under a separate contract). The SSE will be approximately 151 ft. x 158 ft. x 123 ft. tall (approx. 23,800 sq. ft. footprint).

The Contractor shall supply and install a stair tower, hand railing/guard railing and a lighting system and receptacles within the SSE. The Contractor, as part of this work scope, shall construct a vestibule within the SSE. The vestibule will also house electrical equipment (e.g. breakers, switches, etc.) supporting the SSE. Following CPCCo acceptance of the Contractor's Quality Assurance Program and select procedures, the Contractor shall also perform quality assurance inspection and testing.

1.3.1 Included Work: Specific major work elements performed under this work scope include the following:

1.3.1.1 Provide and manage labor, equipment, materials, and services required to complete work. Labor includes participation of Contractor's employees in training and medical examinations required by Contract.

1.3.1.2 Training and qualification of personnel.

1.3.1.3 Preparation of required plans, e.g., Erection Plan, Fall Protection Plans, Critical Lift Plans as well as input, participation in preparation and approval of CPCCo prepared work plans and work packages for each phase of construction work.

1.3.1.4 Mobilization of equipment, tools, material, and temporary facilities.

1.3.1.4.1 Planning and Preparation – Contractor shall participate in work package planning for this work, as noted in Section 01040, prior to the start of work. Part of this preparation effort shall include required personnel training and equipment mobilization to ensure the work may proceed without delay if needed. This work package will include both required scope components and the contingent scope.

SITE PREPARATION PHASE

1.3.2 Installation of a temporary fencing system around the construction site prior to construction of the superstructure to establish control of personnel accessing the site.

1.3.3 Perform specific demolition and pre-ISS stabilization actions within radiological control areas of the 105KE building:

1.3.3.1 Remove steel roll up door at 30 ft. by 30 ft. opening at south wall of 105KE. Drape with bird netting upon removal and then remove the netting prior to project completion.

1.3.3.2 Ensure the D Elevator is at its lower end of travel and stable or pinned in place if above the lower end of travel. Remove or lower (to the bottom of the shaft) the D Elevator counterweight(s). A limited quantity of asbestos cement panels (transite) on the outside/top of the counterweight shaft may need to be removed as part of this activity, based on the Construction Contractor's proposed methods.

1.3.3.3 Stabilize the F Elevator and counterweights to ensure a cable failure in the next 50 years will not result in a load drop.

1.3.3.4 Removal of the following from the exterior of the 105KE building:

1.3.3.4.1 Two metal ladders on the north side (elevated)

1.3.3.4.2 Loose flashing around roof edges

1.3.3.4.3 A vertical conduit pipe hanging down from the east side of the building (elevated)

1.3.3.4.4 A steel conduit duct on the SE exterior corner of the building extending from the +66' elevation down to about the +40' elevation.

1.3.3.4.5 Roof top safety barriers if they will interfere with construction of the SSE.

1.3.3.4.6 Removal of protruding rebar from the sides of the building up to 8 feet from 0' elevation.

1.3.3.4.7 Contractor will be required to transport waste and rad waste materials generated during site preparation activities to collection containers and designated areas adjacent to the 105KE work site.

SSE FOUNDATION AND BUILDING

1.3.4 Preparation of shop drawings, construction drawings, and calculations as required for off-site steel fabrication, temporary bracing of columns and other structural members prior to and during construction. CPCCo and the CPCCo-retained AE Contractor will review shop drawings and calculations and will perform select fabrication shop and field inspections.

1.3.4.1 The contractor shall be aware that the earthworks and foundation contractor installed all concrete embeds to meet installation tolerances as set forth in Section 7.5.1 of the AISC Code of Standard Practice for Steel Buildings and Bridges.

1.3.4.2 Procurement, fabrication, painting, and erection of the SSE structural steel shall be in accordance with design documents. See Section 01500 for transportation related to large items on Hanford roads.

1.3.5 The contractor shall submit an erection plan stamped by a Washington State Professional Engineer. ASCE 37 defines the loads that a structure must withstand during construction, which should be included in the erection plan.

1.3.6 Procurement, fabrication, painting, and erection of the SSE structural steel shall be in accordance with design documents. See Section 01500 for transportation related to large items on Hanford roads.

1.3.6.1 Temporary bracing of the SSE columns will be necessary.

1.3.6.2 Parts of the steel structure will be constructed on the ground and lifted into place. A critical lift plan is anticipated for the main North-South truss placement for the SSE roof structure over the 105KE core area (as defined by DOE-RL-92-36 Crane and Rigging Manual). Lift plans will be prepared as an input to the SSE erection work package.

1.3.7 Procurement, fabrication, and installation of Galvalum® or equivalent siding, roofing, steel connections and supports for this material. This includes necessary flashing components to meet tightness requirements in the construction specification.

ADDITIONAL WORK FOR SSE COMPLETION

1.3.8 Procurement, fabrication and installation of the walls and lighting within the annular space between the SSE and the 105KE building.

1.3.9 Procurement and installation of stairs, hand railing and guard railing in the 105KE Reactor building at the +15' east side doorway and at each observation window created in the outer transite walls per the design drawings.

1.3.10 Procurement and construction of the generator powered 240/120V single-phase distribution system, electrical power equipment, lighting, and equipment per the design drawings. Contractor shall supply and maintain a sized generator capable of operating the lighting system in order to complete system testing before construction acceptance.

CONSTRUCTION CLOSEOUT

1.3.11 Quality assurance inspection and testing, functional testing, National Electric Code inspection(s), compaction testing and construction acceptance testing of work and other code driven inspections will be performed by the Contractor or third party inspectors hired by the Contractor. All records of such inspections shall be submitted to CPCCo.

1.3.12 Official punch-list and final work acceptance documents shall be developed by the Contractor and coordinated with the BTR for final acceptance.

1.3.13 Contractor shall provide CPCCo field markup of drawings (in conjunction with work and design notice change documentation) to support as-built drawing development by others after affected equipment/structures are installed, rather than at once upon project completion.

1.3.14 Demobilization of equipment, tools, material, and temporary facilities.

EQUIPMENT AND EXCLUDED WORK

1.3.15 The Contractor shall be aware that the following items are a part of the overall project and may be referenced in design and other documents, but are not part of this work scope and will be included in another, separately awarded contract:

- Soil removal and backfill around the 105-KE reactor building
- Installation of the grade beam and embeds – embeds will be installed to the tolerances specified in Section 7.5.1 of the AISC Code of Standard Practice for Steel Buildings and Bridges. This scope of work includes installing the grout around the embeds.
- Removal of the stair tower at the southwest corner of 105-KE
- Installation of the below grade ventilation pipe
- Installation of the gravel walkways within the annular space between the reactor building and the structure to be installed in this workscope.

1.3.16 Contractor Equipment & Supplies: The Contractor is responsible for providing all equipment, tools, materials, supplies, and every item of expense, except where specifically excluded. The following equipment and materials shall be provided at a minimum by the Contractor and shall not be considered an all-inclusive list:

a) All industrial safety equipment for Contractor personnel (e.g., eye protection, hard hats, safety-toed footwear, welding hood, face shields, splash protection)
b) Appropriate hearing protection for all contractor personnel
c) Signs, t-posts, ropes, fencing, and other approved barricades for posting zone
d) Traffic revision barriers and signing
e) Fire extinguishers
f) Heavy equipment, cranes, man lifts for demolition and construction (except as noted in Section 01019)
g) Cellular telephone or other communication device capable of initiating emergency notifications at remote work sites
h) Disposal containers for clean trash
i) All permanent construction materials
j) Drinking water
k) Portable lighting/power for work inside the building. Existing exterior portable generator, temporary light strings, spider boxes and cables inside the building can be used to support work inside the building. Generators/power sources will be furnished by the Construction contractor to operate tools, equipment, and additional light plants. Contractor is responsible to perform all maintenance, fueling, and regular checks of all generators and distribution equipment.

1.3.17 Excluded Work: The following are not part of this Contract.

a) Procurement and installation of work and change trailers.
b) Work package preparation (except for providing input - Sections 01040, 1.5 and 01130, 1.8.6) and daily work release from the Shift Operations Manager.
c) Exhibit 7 requirement for the Geotechnical Engineer-of-Record to observe selection, gradation, placement, and compaction of pit run material for structural backfill.
d) Radiological protection and industrial health surveys.
e) Radiological barriers and postings.
f) Respiratory protection as required for radiological and on-site chemical / welding hazards.
g) Waste characterization, designation, profiling, transportation, and disposal (including radiologically contaminated soil excavated under this SOW).
h) Radiological waste containers (i.e. ERDF containers)
i) Design modifications, as-built drawings, and specification development, except to address the need for immediate notification to the BTR and Title III field

engineer(s) when discrepancies are identified and/or changes required. Reference Section 01036.

j) Ground penetrating radar scans of area in support of excavation and foundation scope of work.

k) Items shown on the Drawings included within Exhibit 4 were previously completed by others and are provided to ensure a complete "picture" of the SSE is provided to the Contractor.

1.4 DRAWINGS, SPECIFICATIONS, AND EXHIBITS

1.4.1 Drawings

All Work is to be performed in strict accordance with requirements, design criteria, codes and standards, specifications, drawings, exhibits, and any other documents, which by this reference are made a part of the Statement of Work.

1.4.2 Drawings that show the work are included in DCN# KE-SSE-001, Exhibit 1.

1.4.3 Specifications and Work Processes

1.4.3.1 The Specifications applicable to this Scope are shown below:

Specification No.	Rev.	Title
DCN-KE-SSE-002 Appendix A, D, Q, Y, Z	0	Technical Specifications for CH2M HILL Plateau 105KE ISS Associated Penetration Sealing and Safe Storage Enclosure (SSE) Design
68899-CSI-SPEC-033000	0	CAST-IN-PLACE CONCRETE (included for reference)
68899-CSI-SPEC-055000	0	METAL FABRIBATIONS
68899-CSI-SPEC-260526	0	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
68899-CSI-SPEC-311000	0	SITE CLEARING (included for reference)
68899-CSI-SPEC-312000	0	EARTH MOVING (included for reference)

1.4.3.2 Exhibit 2 is the Functional Design Description for this project which includes Section 5 "Codes and Standards" that may be consulted for project's Code of Record listing.

1.4.3.3 Major CPCCo work processes applicable to this Scope are shown below. Refer to Contract Document Part IV, General Provisions, Paragraph 2.0, "Order of Precedence."

No. Title

DOE-0344	*Hanford Site Excavating, Trenching and Shoring Procedure*
DOE-0346	*Hanford Site Fall Protection Program*
DOE-0343	*Stop Work Procedure*
CPCC-STD-EN-40279	*Engineering Drawing Standards*
MSC-RD-8589	*Hanford Fire Marshal Permits*
CPCC-GD-EN-40256	*Engineering Codes & Standards*
CPCC-PRO-EN-286	*Testing of Equipment and Systems*
CPCC-PRO-EN-8016	*Design Change Notice Process*
CPCC-PRO-EN-16406	*Engineering Vendor Information (VI) Process*
CPCC-PRO-EN-20050	*Engineering Configuration Management*
CPCC-PRO-SH-40078	*Contractor Safety Processes – Appendix F, Safety Program Specification for Contractors*
DOE-0359 and CPCC-PRO-SH-40435	*Hanford Site Electrical Safety Program CPCCo Electrical Safety Program*
CPCC-PRO-WKM-12115	*Work Management*
CPCC-STD-CN-40381	*Construction Work Management Integration*
CPCC-RD-EN-1819	*CPCCo Engineering Requirements*
CPCC-STD-FP-40404	*Fire Protection Program*

1.4.4 The exhibits applicable to the Scope are included below:

Exhibit No.	Title
1	105KE Interim Safe Storage Enclosure Design (DCN-KE-SSE-001
2	105KE Reactor ISS Project Functional Design Description
3	Aerial and Grade Beam Interface Photos

Exhibit No.	Title
4	Additional SSE Drawings – constructed by others
5	Feb 2018 Civil Survey
6	Groundwater Well 199-K-222 Location sketch
7	2019 Geotechnical Engineering Report Update, 105KE Reactor Safe Storage Enclosure Project
8	ISS Project Soil Volume Calculation
9	Preliminary Site Plan for Trailers, Stockpiles and Material Storage
10	WIDS Sketch Showing VCP with SSE Excavation
11	Technical Specifications for 105KE ISS Penetration Sealing and SSE Design (DCN-KE-SSE-002, Appendix A, D, Q, Y, Z)
12	Drawing H-1-25210 and pre-backfill conditions of buried water tunnel

1.4.5 OCCUPANCY RESTRICTIONS INSIDE 105KE

1.4.6 Specific restrictions for work sequencing shall be in place to ensure worker safety in the 105KE building unless special CPCCo approved mitigation steps are implemented. While specific radiological controls and working overhead controls will be in place that are relatively standard, there are notably occupancy restrictions at 105KE. These restrictions are:

1.4.6.1 The Fire Marshal's Permit for work in the 105KE building limits occupancy to 10 people as long as there is only one means for egress. CPCCo will reserve 4 to 5 of the ten allowances for Rad Con and general oversight (based on particular activities), leaving the Construction Contractor 5 to 6 people that can work in the building at any one time Life Safety / Limited Egress issue).

1.4.6.2 The above restriction will remain in effect as long as a single point of access / egress is in use. Should the Contractor choose to open an emergency egress path along the east wall of 105KE, the Fire Marshal Permit limit of 10 people will likely be increased to 20 or 25 people. The contractor would be required to permanently close this emergency egress point at the 105KE wall (similar to what was removed) prior to installation of the east side steel siding of the SSE.

1.4.6.3 No one will be allowed inside the 105KE building during truss, purlin installation and roof sheeting work in order to eliminate the falling materials hazard that this work may present.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION

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SECTION 01019
ITEMS FURNISHED FOR CONSTRUCTION
(CPCCo-Furnished Equipment)

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of Contract to the extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 Department of Energy (DOE) 0334 Hanford Site Excavating, Trenching and Shoring

1.2 ITEMS FURNISHED FOR CONSTRUCTION

1.2.1 CPCCo will furnish the following items to support work. To arrange transfer, notify CPCCo procurement officer or Buyer's Technical Representative (BTR) 8 working days before need.

1.2.2 Contractor shall protect and handle government-furnished items in accordance with Contract Document Part IV, Special Provisions SP-12 Government Property.

Items Furnished for Construction

Quantity	Item	Date Available	Specification Section or Drawing Number	Storage Location	Delivery to Worksite by	Miles to Worksite
As needed	Radiological protection and respiratory protection equipment (Tyvek suits, booties, gloves, hoods, masks, cartridges)	Start of field work	NA	CPCCo storage trailer for PPE. Respiratory equipment issued daily at 100KW	As needed by CPCCo Issued to user on a daily basis by CPCCo	NA
1	Water truck fill station	Start of field work	NA	E of 105KE building at fence line	NA	0
1 ea.	Office, craft and restroom trailers	Mobilization	NA	NA	NA	0
1	Rental diesel generator (Multiquip DH-0750J) for powering interior temporary lighting.	Mobilization, after monthly checks completed.	NA	SE of 105KE	NA	0

1.2.3 Electrical connection for work and change trailers, as noted in Section 01500

1.2.4 Water Fill Station / Fire Hydrant

1.2.4.1 When required, the Contractor will fill their dust suppression water tank from a fill station located east of the 105KE building. This is the preferred and expected water source for the project. However, if the fill station is not available, CPCCo will facilitate the use of a Hanford Site fire hydrant. Fire hydrants will only be used as directed and approved by CPCCo and require an approved Nonemergency Tie-In Permit. CPCCo shall provide Contractor with a permit prior to connecting to the existing water systems, as necessary.

1.2.4.2 There will be no direct hose connection between a fire hydrant and any water truck/tank. Water trucks/tanks will be filled from water fill stations only. If a fire hydrant is required, the water fill station shall use only the 2.5-inch hydrant outlet with a non-rising-stem gate valve with a 2.5-inch NH female inlet and a 1.5-inch NH male or female outlet provided by the Contractor. Hose shall be depressurized when not in use. The hydrant shall be used in the fully open or fully closed position only. The Contractor shall provide a 2.5-inch NH male outlet with one 2.5-inch NH female inlet non-rising stem gate valve on the second 2.5-inch port. This gate valve and port shall not be used except by the Hanford Fire Department.

1.2.4.3 The Contractor shall operate the hydrant fill station and other use of hydrant water in a manner that is protective of the water system and in accordance with the CPCCo permit. The operational use of the system shall not result in washouts of soils surrounding the hydrants or detrimental system conditions such as pressure surges and water hammer. The Contractor shall anticipate restricted flow from the designated fire hydrant that may require the use of a separate fill tank.

1.2.4.4 If a hydrant is used, the Hanford Fire Marshal shall provide a portable backflow prevention device (reduced pressure backflow assembly) approved by CPCCo and by the Washington State Department of Health (WSDOH), as identified on the current approved assembly list. The list is available at www.usc.edu/dept/fccchr/. The Hanford Fire Marshal shall provide yearly inspection and certification of the backflow preventer by qualified personnel. The Contractor is responsible for freeze protection of the backflow preventer assembly and standpipe at all times, and for the fire hydrant when charged for nonemergency use.

1.2.4.5 After surface has been disturbed, stabilize blowing sand areas with ballast / crushed rock or other approved method to prevent wind erosion.

1.2.4.6 Excavate in accordance with DOE-0344, "Hanford Site Excavating, Trenching, and Shoring Procedure" and the Excavation Permit.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01036
REQUEST FOR CLARIFICATION (RCI) AND CHANGES

PART 1 – GENERAL

1.1 REFERENCES

Not Used

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required: None

1.2.3 Approval Not Required: Before starting work, submit name of person responsible for receiving changes to design media in accordance with 1.4.2.

1.3 REQUEST FOR CLARIFICATION (RCI)

1.3.1 This Section covers preparation of Contractor-originated Request for Clarification (RCI) (A-6004-833). RCI forms will be supplied during Preconstruction Conference (see Section 01200) and are also available on the CPCCo web site at the following link: https://chprc.hanford.gov/page.cfm/CPCCoSafetyReferenceDocuments .

1.3.2 RCIs are used by the Contractor to receive clarification from CPCCo at any time during construction. The RCI form is **not** used to document a contract modification, engineering change, or nonconformance. CPCCo's response to an RCI does **not** constitute authorization to perform a change to the Contract.

1.3.3 The Contractor may proceed in accordance with the response only on the basis that the Contractor agrees that it is not a contract change. If the Contractor believes the response constitutes a change, the Contractor shall immediately process a Contract Change form (A-6004-820) and await receipt of additional written instruction from the Contract Specialist.

1.3.3.1 Limit each request to a single issue. Date each request and assign a unique reference number.

1.3.3.2 Provide pertinent information including contract number, subject, drawing numbers, Specification number and paragraph references, date by which response is requested, cost and schedule impacts, site location, descriptive text, and originator's name and signature.

1.3.3.3 Correspondence and inquiries from lower tier subcontractors addressed to CPCCo will be returned to originator or referred to Contractor.

SECTION 01036
REQUEST FOR CLARIFICATION (RCI) AND CHANGES

1.3.4 RCIs shall be prepared in accordance with the form's instructions.

1.4 CHANGES

1.4.1 Authorized changes to design media will be provided to the Contractor via an approved contract modification. Changes may be transmitted to the contractor via an approved redline field change drawing and/or Design Change Notice (DCN) requesting contractor's proposal and agreement prior to authorization of the change.

1.4.2 Contractor shall designate of a single-point-of-contact responsible for receiving changes to drawings, specifications, and other design media. The designee shall be responsible for maintaining documents and ensuring the most current revision is being used for the performance of work. Documents shall be stored in a manner that minimizes the risk of loss or damage.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

CPCCo Central Plateau Cleanup Company an Amentum, Fluor, Atkins LLC

SECTION 01040
COORDINATION

PART 1 – GENERAL

1.1 COMMUNICATIONS

1.1.1 Written communications between CPCCo and Contractor shall be sent to the CPCCo representative identified under "Contract Correspondence" in the Contract Document Part IV – Special Terms. The Contractor may interface with various CPCCo (and other) organizations through the CPCCo Contract Specialist (or designee), as required.

1.1.2 Site Coordination and Interface Requirements include interface with CPCCo Field Work Supervisor (CPCCo FWS), Project Engineer, CPCCo's Buyer Technical Representative (BTR), or designated representatives on a daily basis.

1.1.3 Applicable interfaces, including existing facilities, systems, features, and environmental conditions that the Contractor may interact with, include the following:

- Radiological Control staff and technician
- Waste Management
- Title III Engineering staff
- Safety and Industrial Health representatives
- 100K Engineering
- Quality Assurance
- Environmental Compliance
- Work Planning

1.1.4 Daily construction activity shall be coordinated with CPCCo as identified in the General Provisions for Construction Services entitled "Buyer Technical Representative (BTR) Responsibilities."

1.2 PREPARATION ACTIVITIES

Contractor shall be responsible for the following functions, requirements and preparatory activities:

SECTION 01040
COORDINATION

1.2.1 Ensure equipment, materials, and personnel are ready for the execution of the applicable contract release.

1.2.2 The Contractor shall ensure that Suspect/Counterfeit items are not brought onto the Hanford Site, in accordance with Section 01400.

1.2.3 Ensure all Contractor-supplied tools and equipment are in good working order and free from obvious and known defects, malfunctions and disrepair (e.g., oil leaks, broken and/or missing parts) upon arrival at the job site.

1.2.3.1 Note that CPCCo supplied radiological monitoring equipment is provided for the project and is maintained daily, some delays due to this equipment operability should be anticipated, especially in colder weather.

1.2.4 Site conditions and known hazards include the following that must be addressed within the technical work descriptions. These and other hazards may exist and be generated during the course of the construction project:

1.2.4.1 Radioactive dose rates and contamination in some areas inside and outside of the 105KE building.

1.2.4.2 Open excavations and steep embankments.

1.2.4.3 Small amounts of lead and other hazardous materials in confined locations throughout the 105KE building.

1.2.4.4 Asbestos siding and pipe insulation in many locations throughout the 105KE building. The counterweight shaft for the D Elevator is constructed of transite panels. The Construction Contractor may need to remove panels or sections of panels to access the counterweight chains. Work will need to be performed in CPCCo provided respiratory PPE and other PPE clothing

1.2.4.5 Lead based paint on all painted surfaces.

1.2.4.6 Confined spaces and limited egress routes from the 105KE building.

1.2.4.7 Potential fall hazards exist throughout the 105KE structure and additional ones will be introduced during the SSE construction work.

1.2.5 Each task will be evaluated and the hazard mitigated to the extent possible (ALARA) by application of regulations, policies, procedures discussed or listed in this document and implemented through the various work packages.

SECTION 01040
COORDINATION

1.3 SECURITY, BADGES, AND DOSIMETERS

1.3.1 CPCCo will arrange for issuance of security badges, dosimeters and initiate bioassay requests as required for on-site work subject to the requirements identified in the Contract Document Part IV, Special Provisions – On-Site Services SP-5.

1.3.2 As soon as practical after award, the Contractor shall submit a badge request for personnel required under the various releases so that they may be scheduled for training and medical evaluation to be eligible for work onsite. A badge is required in order to obtain an HID number, which is needed before training and medical evaluations can be coordinated and scheduled. A minimum of two working days advanced notice is required for a Site badge. Contractor shall wear a CPCCo-issued security badge identifying himself/herself.

1.3.3 Contractor employees will be required to submit to vehicle searches and not personally carry or transport prohibited articles.

1.4 WORK HOURS

1.4.1 The Contractor will have access to the job site based on the terms of the Contract.

1.4.2 Work will be performed on a 4-10's schedule Monday through Thursday. The standard workday shall consist of hours of work between the core hours of 6:00 AM to 4:30 PM. No work occurs on Facility Closure Days. If schedule alternative is required, BTR will communicate to Contractor contact.

1.4.3 Contractors should not assume a full 10 hours of productivity to account for daily actions that must be performed by CPCCo and/or contractor personnel. The following activities will be performed on a daily basis that will affect entry and exit times from radiological controlled areas and the amount of work that can be performed.

1.4.3.1 On a typical day, the following activities will be performed in the morning before work in the building can be started: RCT equipment calibrations and daily RWP briefings, pre-job briefing, pickup of respirators from the mask shop for specific work activities, generator startup, opening of access door(s), turning on/of lights as needed, RCT verification of monitoring equipment, and donning PPE before entering the contamination area.

1.4.3.2 Continuous RCT coverage will be required while performing work in the building, which may affect the pace of work and how many simultaneous activities can be performed. The number of RCTs available and fire permit occupancy restrictions will also limit the number of different locations that can be worked simultaneously within the 105KE building.

1.4.3.3 Additional time to exit the contamination area for lunch should be anticipated.

1.4.3.4 Exit from work in contamination areas each day will typically occur around 3:00 pm to allow RCTs to complete exit surveys, prepare reports, and release sampling equipment as necessary to support work the following day.

1.5 WORK MANAGEMENT REQUIREMENTS

1.5.1 Performance of Work on other than regular day shift, movement of equipment, electrical system tie-ins, and equipment tie-ins require coordination and prior approval.

1.5.2 Work control requirements:

1.5.2.1 Work planning is expected to be required to prepare approximately 4 - 6 work packages to support this scope, including but not limited to:

1. Site mobilization and equipment setup/maintenance (including cranes)
2. Facility modifications and counterweight/elevator securement
3. SSE and vestibule erection
4. Electrical & lighting installation and testing

1.5.2.1.1 The Contractor shall provide to CPCCo in writing, the technical approach they will use to perform each of the tasks in radiological and non-radiological areas released under this Contract. This information will be used as an input to identify the necessary administrative and engineering controls that will be incorporated into the respective work packages. Written information will be provided to CPCCo prior to the development of each work package.

A separate written technical approach for removing potentially contaminated soil along the north wall of 105KE and performing the contingent demolition of the discharge chute stub walls will be provided as part of the proposal for evaluation.

1.5.2.1.2 Contractor will be required to support work package preparation activities including the preparation of Job Hazard Analysis (JHA), Fall Protection Plan, and critical lift planning, as required. Contractor will also be required to support hazard review board meetings for selected higher risk or infrequently performed scope items.

1.5.2.2 The Contractor and its lower-tiered subcontractors, that will be performing the work shall support CPCCo sponsored Team Work Planning (TWP) meetings. The planning meetings will be scheduled by CPCCo planning department. The Contractor and/or its lower-tier subcontractors (or representatives) shall provide competent person(s) to support the preparation of all required work documents and shall actively participate

in the planning and preparation of the work instructions, TWP and JHAs for each work package in accordance with CPCC-PRO-SH-40078 – Contractor Safety Processes, Appendix I – Job Hazard Analysis Process for Subcontractors. These meetings will discuss work instruction planning scope, hazards and hazard mitigation and analysis preparation. Contractor shall have a representative from each building trades craft type that are performing the work.

1.5.2.3 The result from the meetings will be the work instructions incorporated into JCS Work Packages that will describe the work scope, define required hazard mitigations, and include the necessary permits, hold points, inspection test reports, and associated project documentation needed to safely complete the work scope. The work instructions shall have sufficient detail to control the work so that it is performed safely and provides for required inspections and testing. Work Packages shall correspond with the project schedule activities.

1.5.2.4 CPCCo Work Control will prepare the Work Package(s) that will invoke requirements for the performance of work. The Contractor shall document and execute their Work in accordance with these requirements. Changes to Contractor Work/Facility Work Package(s) and supporting documents shall be incorporated into the Work Package following the requirements of CPCC-PRO-WKM-12115, Work Management, and Work Change Notice (WCN) process. Allow 10 working days for processing work change notices.

1.5.2.5 Hazard Identification and Control Requirements will include a hazard analysis that addresses each phase of the work and the hazards associated with the environments at each work site location in accordance with this SOW. Contractor will be involved with scope and hazard analysis, which will determine the number of work packages. Each work package will take approximately 20 working days from initial planning to approval.

1.5.2.6 Daily release of work packages and approval to work shall be performed using the Work Release for Construction/Services Organization process.

1.5.2.7 The Contractor shall prepare a Work Release for Construction/Services Organization form (WRCSOF) (A-6004-967), by 1:00 pm daily, for review and approval by the Construction Manager/BTR prior to performing the next day's work. The WRCSOF shall provide a description of the work including a brief work scope statement, location, required permits, any support required from the Owner including inspections or hold points, special precautions about the planned work, and potential impacts such as contamination and service interruption. The form must describe contractor activities and deliveries at the jobsite.

1.5.2.8 This Work Release for Construction/Services Organization Form (WRCSOF) will be used to obtain daily work release approval from the Shift Operations Manager (SOM). The SOM is the Release Authority (RA) for the facility.

1.5.2.9 Only work scope identified in an individual contract release may be released. Daily work will be limited by CPCCo Facility Work Authorization to work described on an approved WRCSOF form.

1.5.2.10 The end-of-the-day meeting will be a Plan of the Day to plan the following day's work activities at a time to be determined by the BTR. This meeting may be a conference call for one or more of the attendees.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01050
FIELD ENGINEERING

PART 1 – GENERAL

Note: CPCCo and/or a separate Title III Engineering contractor will be utilized on the project (provided by others). No action/support provided by Title III Engineer contractor shall be construed to limit or eliminate work scope described in this section.

1.1 CONTROL POINTS

1.1.1 Basic reference points, benchmarks, and other survey data are shown on the Drawings.

1.2 QUALITY CONTROL

1.2.1 Quality Controls (e.g., inspections, tests, material identification, nonconformance control, etc.) shall be established, implemented, and documented using a graded approach to verify that design requirements are appropriately satisfied during construction. The specific controls shall be specified in Quality Assurance Plans and implemented through a combination of project procedures, drawings, specifications, and inspection/test plans. See Section 01400.

1.2.2 Structural alignment, support location, and grades: For surveying work, use of a land surveyor registered in the State of Washington is required. Proof of professional license shall be submitted to CPCCo.

1.2.3 Layout: Use personnel who are trained, skilled, and experienced in construction staking.

1.2.4 Deliverable Documentation: Deliver field notes, records and documentation for Work under this Section in accordance with Section 01720.

1.3 PROCEDURE

1.3.1 Using control points, establish reference points for structural alignment, support location, grades, layout and other construction activity. Record horizontal and vertical data for reference points.

1.3.2 Preserve control points, reference points, stakes and other established markers until either removal is authorized by CPCCo or Work is completed.

1.3.3 Refer to Contract Document Part IV, Special Provisions – On-Site Services SP-4's reference clause FAR 52.256-27, "Layout of Work."

SECTION 01050
FIELD ENGINEERING

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3. Control Points for Construction

3.1. The contractor should be aware that the earthworks / foundation contractor will, after structural fill installation and prior to installation of grade beam formwork, establish the SSE location control points using a Washington State licensed land surveyor.

END OF SECTION

CPCco Central Plateau Cleanup Company an Amentum, Fluor, Atkins LLC

SECTION 01065
PERMITS

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of the Contract to the extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated in the *DD-49286 Rev 7 105KE Safe Storage Enclosure Function Design Description* (Rev 8) Code of Record.

1.1.1.1 Department of Energy (DOE)

0336	Hanford Site Lockout/Tag-out
0344	Hanford Site Excavating, Trenching and Shoring
0346	Hanford Site Fall Protection Program (HSFPP)
0359	Hanford Site Electrical Safety Program (HSESP)
0360	Hanford Site Confined Space Procedure (HSCSP)

1.1.1.2 Washington State Department of Ecology (Ecology)

State Waste Discharge Permit

1.1.1.3 National Fire Protection Association (NFPA)

NFPA 70	National Electrical Code (NEC)

1.2 SUBMITTALS

Not Used

1.3 SUMMARY

1.3.1 Work elements requiring Hanford Site permits are identified in this section. Permits will be provided by CPCCo at no cost, unless otherwise stated.

1.3.2 Notify CPCCo five working days in advance of work requiring permit (unless otherwise stated) and furnish requested information. Post permit in a conspicuous location and ensure employees' awareness of permit contents. Meet the requirements set forth in permit.

SECTION 01065
PERMITS

1.3.3 Permits identified in this section and other sections of the Contract may require use or approval of forms and requests that are not titled as permits but generically referred to as permits. Contractor shall comply with requirements identified on those forms and requests.

1.3.4 It is not anticipated that cultural materials or protected plants or animals will be encountered during project activities in previously disturbed areas. However, workers are to be instructed to watch for bones or possible historic artifacts, especially during excavation and in Borrow Pit(s). If cultural materials are encountered, stop work within the immediate vicinity of the find and notify CPCCo.

1.3.5 Migratory birds may be present at this site and nesting activities shall not be disturbed. If field work is to be initiated during active nesting season (i.e., between mid-March through end of July), Contractor shall contact CPCCo to initiate a review of the area where the work is to be performed to make sure no nesting is occurring within the affected area. Workers are to be instructed to watch for active nests. If active nests and/or any nesting birds are encountered, or birds exhibit defensive behavior, the Contractor shall stop work in the immediate vicinity of the nest and shall contact CPCCo for additional review and required action.

1.3.6 Bats may be present at this site and shall not be disturbed without CCPCo Project Environmental Compliance Officer guidance. If bats are encountered, the contractor shall contact CPCCo to initiate a review of the area where the work is to be performed. Workers are to be instructed to watch for bats. If bats are encountered, the Contractor shall stop work in the immediate vicinity of the bats and shall contact CPCCo for additional review and required action.

1.3.7 Ground-disturbing activities have the potential to spread and increase noxious plants. Vehicles should stay on existing roadways, graveled areas, and bare areas to the extent possible.

1.4 PERMITS

CPCCo will coordinate and obtain the Hanford Site work permits as necessary for performance of the Work. The Contractor shall notify CPCCo fifteen (15) days in advance of work being performed and maintain a copy of all CPCCo-provided permits. The following permits may be applicable depending on the Contractor's installation techniques. Once permits and requirements are obtained by CPCCo, the Contractor shall comply with all CPCCo-issued permits.

SECTION 01065
PERMITS

1.4.1 Hanford Site Confined Space Hazard Identification Form (MSA A-6005-724): Required to access potential confined spaces and obtain a Confined Space Entry Permit.

1.4.2 Hanford Confined Space Entry Permit (MSA A-6005-717): Required prior to entry into any area determined to be classified as a Confined Space and containing conditions detrimental to employee safety in accordance with DOE-0360.

1.4.3 Electrical Installation Permit (A-6005-707): One permit covers new electrical installation work governed by the National Electrical Code (NFPA 70).

NOTE: Electrical installations require NEC compliance inspection by a qualified NEC Inspector in accordance with DOE-0359.

1.4.4 Energized Electrical Work Permit (A-6005-704): Required for work on existing electrical systems.

1.4.5 Hanford Site Excavation Permit: In accordance with DOE-0344. Required for excavation involving hand digging greater than 12 inches in depth, or machine digging. Permits are generated through the MSA Site Excavation Permit Application system.

1.4.6 Fall Protection Work Permit and Portable Ladder Use (A-6004-286): Where it is determined that work will be performed from a ladder where the user is exposed to a fall hazard, the hazard shall be analyzed and documented in a Fall Protection Work Permit (FPWP) (A-6004-286). The FPWP shall be approved before the task begins. Permit to be accessible during performance of work.

1.4.7 Fire Marshal Permit: Notify CPCCo in accordance with Contract Document Part IV, Special Provisions – On-Site Services SP-4. Required for new construction and demolition; when using combustible chemicals, compressed gas, explosives, and flammable/combustible liquids; when performing cutting/welding or outdoor burning; and for any activity falling under the scope of NFPA 1.

1.4.8 Hanford Site Oversize/Overweight Permit (A-6003-609): Required for each vehicle and/or non-reducible load that exceeds the dimensions or weights shown in Contract Document Part IV, Special Provisions – On-Site Services SP-4.

1.4.9 Hot Work Permit (A-6006-115): Required prior to performing any work that may produce a spark, arc, or flame on the Hanford Site.

1.4.10 Nonemergency Hydrant Tie-In Permit (A-6003-681): Required for any water obtained through an existing hydrant. Contractor shall notify CPCCo a minimum of 2 weeks prior to need, in accordance with Contract Document Part IV, Special Provisions – On-Site Services SP-4.

1.4.11 Radiological Work Permit (A-6004-602): Required prior to performing any work within a radiological posted area.

1.4.12 State Waste Discharge Permit: CPCCo has already obtained the required permit. No discharges of water are allowed or authorized within 300 horizontal feet of any known crib, catch basin, infiltration trench, or underground disposal area.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01110
OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 Code of Federal Regulations (CFR)

Title 29	Department of Labor: Occupational Safety and Health Administration (OSHA)
Part 1910	Safety and Health Regulations for General Industry
Part 1926	Safety and Health Regulations for Construction

1.1.1.2 Department of Energy, Richland Operations (DOE-RL)

92-36	Hoisting and Rigging Manual
DOE-0359	Hanford Site Electrical Safety Program (HSESP)
DOE-0343	Stop Work Procedure
DOE-0352	Hanford Site Respiratory Protection Program (HSRPP)
DOE-0344	Hanford Site Excavation, Trenching and Shoring Procedure (HSETSP)
DOE-0346	Hanford Site Fall Protection Program (HSFPP)
DOE-0336	Hanford Site Lockout/Tagout

1.1.1.3 Institute of Electrical and Electronics Engineers (IEEE)

C2	National Electrical Safety Code (NESC)

1.1.1.4 National Fire Protection Association (NFPA)

70	National Electrical Code (NEC)
70E	Standard for Electrical Safety in the Workplace

SECTION 01110
OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required

1.2.2.1 Safety and Health Program: CPCC-PRO-SH-40078, *Contractor Safety Processes* Appendix F is the pre-approved safety and health procedure; however, Contractor may submit, with proposal, an alternate safety program. The alternative program shall comply with federal, state, and local codes and CPCC-PRO-SH-40078, Appendix F.

1.2.2.2 Designated Safety Representative: Before starting work, submit name of individual identified as the "Designated Safety Representative," in accordance with Special Provisions – On-Site Services SP-5. Contractor shall notify the Contract Specialist if the name of the Designated Safety Representative changes.

1.2.2.3 Hazard Identification and Mitigation actions documented in the JHA / Activity Hazards Analysis (AHA): Prior to onsite work and completion of the respective work package, submit JHA/AHA identifying safety hazards as required by this Section.

1.2.2.4 Critical Lift Plan(s) (DOE-RL-92-36): Required to minimize the possibility of equipment failure or human error to a hoisting or forklift operation involving a load that, if mishandled, poses unacceptable circumstances. A Critical Lift Plan is anticipated for the main North-South truss placement for the SSE roof structure over the 105KE core area.

1.2.2.5 Fall Protection Work Permit (A-6004-286) shall be prepared by the Contractor and approved by CPCCo for use whenever work is planned on unprotected work surfaces 6 ft. or greater from the floor.

1.2.3 Approval Not Required

None

1.3 SAFETY

1.3.1 Contractor shall comply with the on-site provisions identified in the Contract Document Part IV, Special Provisions – On-Site Services SP-5.

1.3.2 The Contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable

for the safe performance of work. The Contractor shall comply with, and assist CPCCo in complying with all applicable laws, regulations and directives.

1.3.3 Contractor shall perform daily safety inspections of trailer area and work areas. Contractor shall submit these inspections to the CPCCo OS&IH Manager weekly. Inspections can be documented on CPCCo form A-6006-924 or other equivalent document as long as all areas/topics included on this form are reviewed and documented daily.

1.3.4 The Contractor and its lower-tier subcontractors shall take all reasonable precautions in the performance of the work to protect the safety and health of employees and of members of the public. Where there is a difference in regulations or requirements, the most stringent shall apply.

1.3.5 While working within a facility or remote area, Contractor shall participate in emergency drills. Contractor may request exemptions. **NOTE: It is anticipated that a minimum of one monthly drill will take place.**

1.3.6 Contractor shall utilize gloves that are rated as cut/puncture-resistant for all activities that present the potential for a cut or puncture to the hand. Leather gloves are not rated as cut/puncture-resistant and are not permitted. Contractors shall still use gloves (e.g., leather, canvas, cotton, etc. as appropriate for the work activity) to prevent and/or protect the hand from abrasions and contusions. Cut-resistant gloves come in different performance strengths; the Contractor needs to exercise the right amount of care to ensure they have selected the proper type of gloves for the hazard to be encountered. CPCCo does not specify or recommend any brand-name gloves; but does require these gloves to be rated as cut/puncture resistant.

1.3.7 Contractor shall review the work scope, location, and hazards to determine if the activity is skill-based or beyond skill-based work (i.e. requires further analysis through a Job Hazard Analysis). Contractor shall ensure that contractor employee craft workers are, at a minimum, trained and qualified to the respective Craft Specific Hazard Analysis (CHA) for each craft listed and the controls associated with the CHA.

1.3.8 Electrical Safety Requirements

1.3.8.1 Work practices and electrical safety training and qualification shall be in accordance with DOE-0359. Electrical equipment and industrial control panels delivered or brought on to the site in performance of the contract shall be labeled by an organization currently recognized by OSHA as a Nationally Recognized Testing

Laboratory (NRTL). Equipment installed as part of the contract shall comply with the NEC and, where applicable, IEEE C3 (NESC).

1.4 HAZARD IDENTIFICATION

1.4.1 Prior to performing any work activities, Contractor shall submit a JHA/AHA for the planned construction activities.

1.4.1.1 Submit a second JHA/AHA for general office duties performed in office facilities or ground-level observations/walkthroughs in radiological-controlled areas requiring a General (Not Specific) RWP only. Only observation activities are allowed under this JHA/AHA; no hands-on work activities may be performed. Only ground-level observations are permitted, no ladder/scaffolding access is allowed.

1.4.2 Contractor shall prepare JHAs/AHAs to address specific work activities and hazards associated with the specific work and to identify the controls necessary to eliminate or control the hazards. The JHA/AHA shall be written in such a manner as to be understood and usable by Contractor personnel in order to aid them in the identification, control, and response of potential hazards; it is not just a compliance document. To achieve the level of coordination desired, approval of the JHA/AHA are required to ensure proper safety planning and communication prior to the start of work. The JHA/AHA shall be prepared in a format provided by CPCCo, and the Contractor shall submit a JHA/AHA for approval prior to work on each release.

1.5 MEDICAL EXAMINATIONS

1.5.1 Medical examinations and Employee Job Task Analysis (EJTA) evaluation forms are required for Contractor personnel prior to starting work on the Hanford Site. See the Contract Document Part IV, Special Provisions – On-Site Services SP-5.

1.5.2 The Contractor shall immediately notify the BTR and the Contract Specialist of any injuries or incidents, to include damage to Contractor-owned property or equipment.

1.5.3 Contractor shall take appropriate action, up to and including stopping work, and immediately notify the CPCCo if an unplanned risk or hazard is discovered that is not covered by directions provided by CPCCo. This action includes notifying CPCCo if the work exposes their workers to hazards that require medical monitoring.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.1. CPCCo will provide Hanford medical facilities for emergency or life-threatening injury situations (those requiring immediate medical attention). All injuries, accidents, fires, and near misses shall be reported to CPCCo, including fires that are extinguished without causing damage.

3.2. To ensure worker safety, work or portions of work may be temporarily and incrementally shut down due to high winds, lightning, or other inclement weather as determined by CPCCo. Contractor shall not be additionally compensated in terms of cost or schedule for weather-related shutdowns (Refer to Contract Document Part IV General Provisions, Paragraph 5.3 Delays – Force Majeure). CPCCo issues warnings via radio system, public announcement, or in person.

3.3. The Contractor shall ensure that subcontractor personnel are apprised of the warnings and take the required actions as stated in CPCC-PRO-SH-28034, ADVERSE WEATHER for:

- Lightning Safety
- Snow and Ice Safety
- Wildfires affecting work areas or site access
- Torrential Rain and Hail Safety
- Early Release Due to Adverse Weather
- Wind Conditions

3.3.1. Sustained winds greater than 15 mph – the necessity for crane operations shall be closely scrutinized.

3.3.2. Excavation of radioactive material shall cease if sustained winds exceed 20 mph. Depending on dust hazard, personnel may be relocated or directed to shelter. If sustained winds of 20 mph are predicted during the work shift, excavation of radioactive material will not be allowed to start.

3.3.3. Sustained winds greater than 29 mph and/or gusts greater than 40 mph – all crane operations shall cease and be secured. No open-air breach of radioactive systems or vessels will be allowed. All loose outdoor material shall be secured. The subcontractor's Health and Safety representative shall review work on roofs and

elevated surfaces before continuing. All personnel working outdoors are required to wear safety goggles. Depending on dust hazards, work may be stopped. Personnel may be directed to shelter. Dust masks may be required.

3.3.4. Sustained winds greater than 30 mph and/or gusts greater than 45 mph – all outdoor work activities may be stopped and limited to those approved by CPCCo and subcontractor's Health and Safety representative. Personnel may be directed to shelter. Dust masks may be required.

3.3.5. Sustained winds greater than 60 mph – outdoor work activities shall be curtailed. Personnel will be directed to shelter. Site closure may be implemented and all work activities ceased.

3.3.6. Thunderstorm/lightning advisory based on lightning activity within a 50-mile vicinity of the Site. Subcontractor personnel shall not work on roofs or elevated surfaces. Personnel shall stay away from construction equipment such as drilling rigs, cranes, boom trucks, or elevated work platforms. These protective actions shall remain in place until CPCCo cancels the warning.

NOTE: Contractor shall provide personal protective equipment to meet the above conditions.

3.3.7. In addition to these warnings, CPCCo also provides the following:

3.3.7.1. Snow and ice removal is provided on Site roads. The Contractor shall provide snow removal and ensure safe walking and transfer conditions for walkways and access points around their offices and work areas and the jobsite within the project boundaries.

3.3.7.2. In response to winter storm conditions, CPCCo may close the Site or release Contractor's employees early. If so, CPCCo will make appropriate announcements and coordinate the closure or early dismissal.

3.3.7.3. The Contractor shall be responsible for freeze protection in areas turned over to the Contractor by CPCCo.

3.3.7.4. The following CPCCo Management Directives apply due to current COVID-19 conditions:

- CPCC-MP-SH-54517, *CPCCo Social Distancing Plan*
- CPCC-MD-SH-54500, *COVID-19 Notification Response*

- CPCC-MD-SH-54505, *COVID-19 Briefing and Implementation of Social Distancing Guidelines*

END OF SECTION

SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.1.1 Code of Federal Regulations (CFR)

Title 10	Energy
Part 820	Procedural Rules for DOE Nuclear Activities
Part 830	Nuclear Safety Management
Part 830.122	Quality Assurance Criteria
Part 835	Occupational Radiation Protection
Title 29 Labor	
Part 1910	Safety and Health Regulations for General Industry
Section 1200	Hazard Communication
Part 1926	Safety and Health Regulations for Construction
Title 40	Protection of Environment
Part 82	Protection of Stratospheric Ozone
Part 112	Oil Pollution Prevention
Part 280	Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

1.1.1.2 Washington State Department of Ecology (Ecology)

State Waste Discharge Permit

1.1.1.3 National Fire Protection Association (NFPA)

30 Flammable and Combustible Liquids Code

1.1.1.4 Revised Code of Washington (RCW)

Title 46 Motor Vehicles

Chapter 46.11 Vehicle Licenses

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required

1.2.2.1 Waste management information: Eight workdays before starting work, submit a Waste Management Plan, in accordance with the Special Provisions 4 and 5, for managing waste generated during work.

1.2.2.2 Safety Data sheets (SDS): Before starting work, submit SDS for hazardous chemicals (1.10.2).

1.2.2.3 Chemical sources: Twelve work days before starting work, submit detailed information relative to any anticipated on site process involving the application of volatile chemicals (use of a volatile cleaning agent, application of polyurethane coating, etc.)(1.10.3).

1.2.2.4 Chemical inventory: Five workdays before starting work, submit inventory of chemicals that will be brought to the worksite in accordance with Contract Document Part IV, Special Provisions – On-Site Services SP-4, SP-5, and this Section.

1.2.2.5 Air emissions: Twelve work days before starting work, submit inventory of air emission sources to be used on Site (1.11).

1.2.2.6 Dust control plan: Eight work days before starting work, submit a Dust Control Plan in accordance with the Benton Clean Air Authority (1.11.2.1).

1.2.2.7 Radioactive sources: Twelve work days before starting work, submit a list of all radioactive sources to be brought on Site (1.8.9).

All materials that are defined by the Department of Transportation (DOT) as a Hazardous Material in 49 CFR 171.8 must be packaged and shipped in full compliance with the DOT regulations Parts 171-180.

1.2.3 Approval Not Required: None

1.3 WASTE MINIMIZATION

1.3.1 Minimize waste in accordance with the following waste management hierarchy.

a. Source reduction
b. Reuse
c. Recycling
d. Compliant disposal

1.3.2 Source Reduction

1.3.2.1 Material substitution: Minimize number of chemicals used to perform same or similar tasks. Where practical, replace hazardous materials with non-hazardous or less hazardous substitutes. Before substitution, obtain approval in accordance with Section 01630.

1.3.2.2 Inventory reduction: Minimize product inventory to reduce accumulation of partially used and unused materials requiring disposal. Remove partially used lots and unused materials from worksite at Contract completion.

1.3.2.3 Packaging: Minimize packaging brought on worksite. Whenever feasible, return empty containers to vendor.

1.3.2.4 Waste segregation: Separate wastes to avoid creating additional wastes and mixtures that cannot be recycled, or that may be more difficult to manage.

1.3.2.5 Process modification: Streamline processes for more efficient operation and less waste generation.

1.3.3 Reuse/Recycling: Reuse materials, if possible, rather than discarding as waste.

1.4 DISPOSAL OF INERT/DEMOLITION AND NONHAZARDOUS WASTE

1.4.1 Handle and dispose of waste in accordance with applicable federal, state, and local laws, regulations and requirements, the Contract Document Part IV, Special Provisions – On-Site Services SP-5 and this Section. Notify CPCCo prior to shipment of inert/demolition waste for radiological survey by others if removing from contaminated area.

1.4.2 Non-hazardous: Dispose of non-hazardous debris using bins provided by Contractor.

1.4.3 Any nonradioactive inert waste (i.e. broken asphalt, broken concrete, glass, brick, aluminum, stainless steel, wood, and overburden/spoils material such as rock and earth) may be disposed at no charge to Contractor at Pit 9 located in 200 West Area. Notify CPCCo at least 24 hours prior to need for entry.

1.4.4 Contractor will disposition other waste generated on the Hanford Site such as demolition rubble, construction debris, trash, and solid waste not included in other waste categories specifically mentioned in the contract.

1.5 HAZARDOUS WASTE

1.5.1 Hazardous materials shall be managed in accordance with the Contract Document Part IV, Special Provisions – On-Site Services SP-5. Promptly report all spills of hazardous waste.

1.5.2 Flammable/combustible liquid storage shall be in accordance with NFPA 30.

1.6 DISPOSAL OF ASBESTOS

1.6.1 Contractor shall not perform any work that would disturb asbestos-containing material nor remove any load-bearing structures of any building without first notifying the BTR. It is expected that very small quantities of floor tiles and transite pieces will be removed and disposed as part of this scope of work.

1.7 DISPOSAL OF DANGEROUS AND MIXED WASTE

1.7.1 Handle and dispose of waste in accordance with applicable federal, state, and local laws, regulations and requirements and CPCCo procedures. Hanford-specific requirements also apply to dangerous and mixed waste generated on the Hanford Site.

1.7.1.1 Notify CPCCo at least five days before generation of waste and immediately after spill and other unforeseen waste generation. Notification shall identify waste stream and provide an estimated quantity of waste to be generated.

1.7.1.2 Upon notification by Contractor, CPCCo will establish a CERCLA Waste Area within the worksite and provide labeled containers affixed with numbers.

1.7.2 Separately accumulate waste from each waste stream in accordance with applicable federal, state, and local laws.

1.7.2.1 During spill cleanup and waste accumulation, cumulatively record waste inventory on Waste Inventory Sheet and Continuation Sheet (A-6003-706).

1.7.2.2 Containers are set up and managed by CPCCo. Manage waste in accordance with the Contract Document Part IV, Special Provisions – On-Site Services SP-5.

1.7.3 CPCCo will coordinate pick up and disposal of properly sealed CERCLA waste after notification by Contractor.

1.7.4 CPCCo will conduct inspections of CERCLA Waste Area consistent with applicable CERCLA decision documents.

1.8 RADIOLOGICAL CONTROL

1.8.1 If work is deemed Radiological in nature, the Contractor shall be subject to provisions mandated in Part 10 CFR 835 *Occupational Radiation Protection*, to CPCCo-00073 *CPCCo Radiological Control Manual*, and this Section. The Contractor shall ensure that all personnel and other persons under its control, including subcontractors hired to perform any portion of this contract, comply with the requirements of the CPCCo Radiological Control Manual (CPCCo-00073) and regulations pertaining to control of occupational radiation and/or contamination as set forth herein. Unless specified otherwise in the contract, the Buyer will provide the Occupational Radiation Protection Program. If the Contract involves work in areas that contain irradiated or contaminated materials or equipment, the Contractor and its personnel shall be required to undergo a Buyer-provided orientation and appropriate radiological training as required under the CPCCo Radiation Protection Program. (SP 5.6A)

1.8.2 As soon as possible after personnel are badged, the Contractor shall submit a dosimetry/bioassay request (Form A-6004-763) for personnel who will perform work in radiological areas under the various releases of this contract.

1.8.3 Contractor and lower-tier contractor personnel may be issued a basic dosimeter for work performed under this Contract that occurs in radiologically controlled areas. Dosimeters are issued free of charge by CPCCo Dosimetry. Dosimeters will be issued for the duration of the security badge or for the current calendar year, whichever

occurs first. If a Contract performance period extends beyond the last Friday of the current calendar year, a new dosimeter shall be provided before that date. (SP5.6H)

1.8.3.1 Dosimeters, which expire at the end of a calendar year, shall be returned by January 10 of the next calendar year.

1.8.3.2 Dosimeters may be issued for shorter periods of time or to monitor specific locations based on the radiological requirements of the activity. The Contractor agrees to comply with approved CPCCo procedures for assignment of dosimeters, wearing of dosimeters, investigation of lost dosimeters, and return of dosimeters.

1.8.3.3 The contractor shall be charged a fee of $500 per incident if contractor or lower-tier contractor personnel fail to return their dosimeters upon leaving, discharge or release from employment to the contractor.

1.8.4 Contractor or lower-tier contractor personnel may be required to participate in bioassay programs for work performed under this Contract that occurs in radiologically controlled areas. Construction contractor should assume that all personnel performing work at the job site will require bioassays. Bioassays are performed free of charge by CPCCo Dosimetry or approved subcontractors. The Contractor agrees that its personnel shall participate in bioassay programs required by the Buyer.

1.8.5 The Contractor and Lower-Tier Contractors are required to notify female workers of their right to Declare Personal Pregnancy as described in CPCC-PRO-RP-385 *Declaring Personal Pregnancy.*

1.8.6 The Contractor shall provide to CPCCo, in writing, the technical approach they will use to perform each of the tasks in radiological areas released under this Contract. This information will be used as an input to the development of the relevant work packages. The Contractor will follow ALARA measures and other administrative and engineering controls incorporated into the work packages to minimize worker exposures to radiological hazards.

1.8.7 CPCCo's program requirement is to conduct personnel surveys immediately upon leaving a contamination area, high contamination area, or airborne radioactivity area. The Contractor agrees that its personnel shall submit to such a survey and, if necessary, decontamination procedures in the event the survey determines that personnel are contaminated. (SP 5.6B)

1.8.8 Contractor shall not utilize vacuum trucks or HEPA-filtered vacuums, or set up enclosures with exhausters or similar emission units at any radioactively

contaminated location on the Hanford Site without the express written approval of CPCCo. It is anticipated that the Contractor may request use of a CPCCo regulated vacuum truck to assist with removal of soil around the groundwater well north of the reactor wall.

1.8.9 The Contractor shall request and obtain written approval from CPCCo prior to bringing a radioactive source on site. See CPCC-PRO-RP-387 for additional information. Request shall include information on the source, license, training and controls that the Contractor will use while the source is onsite. This includes any source or equipment that contains sources (e.g. soil density meters) that are governed under a U.S. Nuclear Regulatory Commission (NRC) license or a license by an NRC-agreement state. Copy of the license shall be submitted 8 days prior to the source being brought on site.

1.8.10 The Contractor shall notify the BTR in writing at least 48 hours in advance of bringing any equipment to the Hanford Site. CPCCo may conduct radiological surveys to verify compliance with 10 CFR 835 on any equipment, tools or personal property brought on to the Hanford Site at any time during the period of performance of this contract and before allowing any such equipment, tools or personal property to be brought onto the Site or before leaving the Site. (SP5.6B)

1.8.11 Based on the results of the survey, CPCCo may refuse to allow radiologically contaminated materials to be brought onto the Site or to leave the Site. If Contractor's originally uncontaminated equipment, tools or personal property becomes contaminated during performance of the work on Site through no fault or negligence of the Contractor, the buyer may attempt to decontaminate. If the contaminated property cannot be decontaminated so that it can be cleared for public use, CPCCo reserves the right to destroy or dispose of the property at no cost to the Contractor. In such instance, an equitable adjustment to the contract "may" be made if not already addressed elsewhere in the contract. (SP5.6D) Contractor’s equipment utilized to perform radiological work may be subject to intermittent radiological surveys approximately 2 to 3 times per work day depending on the location of equipment operation. Radiological surveys are expected to take between 10 – 15 minutes each. Contractor shall make equipment available for intermittent radiological surveys at the request of CPCCo-provided RCT/HPT.

1.8.12 Removal of the following requires a contamination release survey for each removal. Contractor will not be charged for survey. CPCCo will arrange for survey upon request by Contractor. Allow 8 hours for processing request and 4-8 hours for survey.

a. Material from radiological areas and radiological buffer areas

b. Foreign materials and discolored soil discovered during excavation

c. Known or suspected contaminated soil from around the building

d. Equipment

1.8.13 During any work disturbing the existing ground surface, CPCCo-provided RCT/HPTs will be present to conduct intermittent radiological surveys of the excavated or disturbed material, if deemed necessary by CPCCo. The radiological surveys will be conducted on the spoils removed during any soil excavation as well as on the equipment being utilized for this excavation. These radiological surveys are not expected to significantly disrupt the Contractor's ability to perform the required work but will affect the rate at which soil can be excavated and or stockpiled from the work site. Contractor shall provide at least 2 work days' notice to CPCCo of any excavation or work activity that will significantly disturb the existing ground surface.

1.8.14 If unexpected levels of radiological contamination or dose rates are encountered during excavation or other work activities, Contractor shall place equipment in a safe condition and remove all personnel from the area as directed by the RCT/HPT. Radiological controls shall be evaluated by the Radiological Protection organization to the encountered conditions and modified as required. Contractor shall seek direction from CPCCo prior to resuming work activities.

1.8.15 A release survey is required to be conducted by CPCCo provided RCTs/HPTs of all equipment utilized in excavation. Release surveys shall be conducted prior to equipment being removed from the project site. The survey is expected to take approximately one day per piece of equipment. Contractor shall provide 2 work days prior notice to CPCCo of need for RCT/HPT coverage to conduct required release surveys of Contractor and/or CPCCo provided equipment.

1.8.16 Contractor may also request a contamination release survey for each piece of equipment or material removed from a radiological buffer area. Contractor will not be charged for survey.

1.8.17 If surveys reveal that equipment or material is not radiologically contaminated, disposition material as planned.

1.8.18 If survey reveals that equipment is radiologically contaminated, more rigorous surveys and/or decontamination will be required by CPCCo prior to release back to the Contractor. CPCCo will determine if release back to the Contractor is possible.

If not possible, the Contractor will be compensated for items not returned at their fully depreciated value.

1.9 RADIOLOGICAL SAFETY

1.9.1 This work scope is to be conducted in radiological controlled areas and therefore the Contractor shall be subject to 10 CFR 830.122, and the enforcement actions under 10 CFR 820.

1.10 LIQUID EFFLUENTS

1.10.1 In accordance with Contract Document Part IV, Special Provisions – On-Site Services SP-4, SP-5, and CPCC-PRO-SH-40078 - Contractor Safety Processes, when the Contractor brings chemicals on site, the activity is subject to CPCCo's Chemical Management System Program. The Contractor shall fill out and keep current a Chemical Inventory Worksheet (form A-6004-750).

1.10.2 Safety Data Sheets (SDS) for hazardous chemicals (as defined by 29 CFR 1910.1200) that will be used during the work activity shall be kept current. Contractor shall provide the list to the assigned BTR when the list has been updated.

1.10.3 Contractor shall submit detailed information relative to any anticipated process involving the application of volatile chemicals (e.g., use of a volatile cleaning agent, application of polyurethane coating, etc.).

1.10.4 Concrete rinsate discharge locations require approval by CPCCo. Concrete rinseate discharge authorization forms shall be completed and approved prior to discharge.

1.10.5 Liquid discharge for hydrotesting, flushing, or other construction operation other than dust control, requires pre-approval by CPCCo and shall be performed in accordance with the State Waste Discharge Permit.

- No water shall be discharged within 300 horizontal feet of any known crib, catch basin, infiltration trench, or underground disposal area.
- No discharge shall be allowed within a surface contaminated area (areas with dangerous waste and/or radioactive contaminants), unless discharge is an approved incidental release.
- Other restrictions identified in the State Waste Discharge Permit and the accompanying conditions include the need to reuse/recycle and the need to discharge to the Treated Effluent Disposal Facility; discharge rate, volume,

additives, source water, contaminants, and logging are also covered in permit conditions (Pollution Prevention and Best Management Practices section).

1.11 AIR EMISSIONS

1.11.1 The following emissions are regulated and shall comply with applicable federal, state, and local laws, regulations and requirements:

a. Fugitive emissions and dust.
b. Abrasive blasting.
c. Ozone-depleting substances.
d. Non-routine (unplanned) emissions.
e. Radioactive airborne emissions (from disturbing contaminated soil).

1.11.2 Contractor shall take reasonable precautions to minimize fugitive dust during performance of this work.

1.11.2.1 A dust control plan prepared in accordance with Benton Clean Air Authority guidelines shall be submitted by the Contractor and shall be approved by the Buyer prior to commencement of work activities.

1.11.2.2 Any new work that may cause a potential for radioactive dust requires prior BTR approvals since extra measures to prevent and/or control dust may be required.

1.11.3 Contractor shall not conduct open burning without the express written approval of BTR or CM.

1.11.4 Air emission sources also include non-road internal combustion engines for power generator or air compressor, loader, backhoe, welder, chain saw, etc. Licensed motor vehicles, pursuant to RCW 46.16 are exempt from the inventory. However, mounted internal combustion engines not used to propel the vehicle (e.g.; mounted generator) shall be inventoried.

1.11.5 The Contractor shall comply with CPCC-PRO-SH-40078 - Contractor Safety Processes, Appendix F, Section 2.15, for controlling exposures to airborne hexavalent chromium. These requirements are specifically applicable to welding, grinding, torch cutting, metal buffing and metal polishing, and spray-painting activities.

1.12 CONTINGENCIES

1.12.1 Isolate and secure spill area in a manner that protects human health and the environment. Take direct action if nature of spilled or unforeseen waste material is known and if material can be immediately and safely absorbed, neutralized, or otherwise controlled.

1.12.2 Notify CPCCo upon occurrence or discovery of hazardous substances and non-hazardous material spills and of unforeseen dangerous waste generation. Notification shall identify waste stream if known and include identification and quantity of waste. Clean up areas contaminated by spilled material and manage spill residues in accordance with this Section.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01150
TRAINING AND QUALIFICATIONS

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.1.1 Code of Federal Regulations (CFR)

Title 49	Transportation
Part 383	Commercial Driver's License Standards
Part 390	Federal Motor Carrier Safety Regulations
Part 851	Worker safety & Health Program (851.25)

1.1.1.2 Department of Energy, Richland Operations (DOE-RL)

92-36	Hoisting and Rigging Manual
0359	Hanford Site Electrical Safety Program (HSESP)
0336	Hanford Site Lockout/Tag-out
0346	Hanford Site Fall Protection Program (HSFPP)
0355 Program Description)	Hanford Standardized HAZWOPER Training

1.1.1.3 Washington Administrative Code (WAC)

Title 296	Department of Labor and Industries

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required

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1.2.2.1 After contract award, the Contractor shall demonstrate compliance with CPCCo Training Requirements in accordance with this SOW by providing a training matrix for review.

1.2.2.2 Before starting work, submit documentation of successful completion of training requirements and certification that all training and qualifications are current.

1.2.2.3 Hoisting and rigging: 8 days after starting hoisting and rigging work, support CPCCo's on-the-job-evaluation (OJE), required for contractor performed hoisting and rigging operations, as stated in 1.3.1.8.

1.3 REQUIREMENTS

1.3.1 General

1.3.1.1 The Contractor shall provide for self and major subcontractors (civil, electrical, mechanical, steel fabricator and steel erection) their experience completing construction projects that are similar in scope and scale to this Statement of Work, as specified in the Request for Proposal.

1.3.1.2 Contractor shall provide appropriately trained and qualified staff to perform the type of work associated with their skill of craft (Ironworker, Electrician, Pipefitter, etc.) at the Hanford Site. The Contractor shall provide a base staff consisting of a safety representative (SR) and FWS (as a minimum) to administer the work. The FWS is a supervisory role only and is not permitted to perform work.

1.3.1.3 Personnel Qualification

Proposed Key Personnel shall be fully committed and solely dedicated for the entire term of the project. Contractor shall request from Buyer and receive Buyer approval prior to replacement or substitution of any Key Personnel. The Offeror shall provide a current resume for each of the following Key Personnel.

Project Manager

- Must have a minimum of 10 years general construction management experience; 5 years minimum project management experience.

On-Site Safety Representative

- Must have a Construction Health and Safety Technician Certification or Occupational Health and Safety Technologist Certification by the Council on Certification of Health, Environmental and Safety Technologists, or be an

Associate Safety Professional or a Certified Safety Professional from the American Board of Certified Safety Professionals.

- Completed the OSHA 10-hour safety course.
- 10 years' full time experience in a safety and health position in industrial safety, and familiar with radiological contaminated materials and chemical and hazardous material handling experience.
- Competent in performing basic industrial hygiene monitoring activities.
- Previous safety oversight on projects involving building construction, working from heights and large cranes.

On-site Field Work Supervisor

- 10 years' general construction experience.
- 5 years' Supervisory Level, which shall include labor management associated with bargaining units.
- Completed the OSHA 10-hour safety course.
- Familiar with supervising work involving radiologically contaminated materials and chemical and hazardous material handling experience.
- Previous supervision on projects involving building foundations, steel frame construction, working from heights and large cranes.

Quality Assurance Manager

- Must have a minimum of 10 years construction quality assurance/quality control experience.

1.3.1.4 Task- and facility-specific training is required in this Statement of Work, the Contract Provisions, and other documents referenced herein. The training listed may not be all-inclusive of training required.

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TRAINING AND QUALIFICATIONS

1.3.1.5 Required training shall be completed prior to related work being performed.

1.3.1.6 CPCCo will provide task- or facility-specific training required for the Hanford Site, which includes the class, instructor, and required training material. Contractor is responsible for cost of labor to complete all required training.

1.3.1.7 When offsite equivalent training is taken, **Contractor is responsible for all training costs.** CPCCo will provide equivalent onsite training or reimbursement for any equivalent onsite/offsite training costs.

Hanford Course Number	Course Title	CPCCo Documents	Off-site training acceptable (Yes/No)
GENERAL SAFETY			
02006L	Asbestos Awareness	CPCC-STD-SH-52894	Y
170500	Basic Medic First Aid/ CPR/AED (Typically, the supervisors, safety and electricians are required)	DOE-0359 TPD-0040	Y
000006	CPCCo - General Employee Training	N/A	N
020049	Compressed Gas Cylinder Safety	CPCC-STD-SH-40481	Y*
020134	Hanford Site Confined Space Entry	DOE-0360	Y*
076200	100K Project FEHIC - CBT	DOE/RL 94-02 & CPCC-PRO-EM-7647	N
044400	Fire Watch Training	CPCC-STD-FP-40404	Y
042730	Flagging and Traffic Control	CPCC-PRO-SH-40473	Y
031420	3-Day Supervised Field Experience	10CFR1926	N
620194	CPCCo Hearing Conservation - CBT	CPCC-PRO-SH-40479	Y
620193	CPCCo Temperature Extremes - CBT	CPCC-PRO-SH-121	Y
020550	MSA TL Hood Only	DOE-0352	N*
020525	MSA TL PAPR Facepiece/Hood	DOE-0352	N*
020044	Quantitative Mask Fit	DOE-0352	N
020066	Respiratory Knowledge-Based Initial	DOE-0352	N
026100	OSHA 10-Hour Health and Safety	N/A	Y
644391	CPCCo Portable Ladder Safety - CBT	CPCC-PRO-SH-40314	Y

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Hanford Course Number	Course Title	CPCCo Documents	Off-site training acceptable (Yes/No)
600060	CPCCo Competent Person Portable Ladder Inspection - CBT	CPCC-STD-SH-40314	Y
031310	8-Hour Manager / Supervisor Hazardous Waste	DOE-0355 CPCC-MP-TQ-011	Y
031220	40-Hour Hazardous Waste Worker – Field	DOE-0355 CPCC-MP-TQ-011	Y
020001	Initial Rad Worker II	DOE-0357	Y
600078	CPCCo Vehicle Spotter Training	CPCC-PRO-SH-40473	Y
750000	Excavation, Trenching, and Shoring	DOE-0344, AppendixF	Y
6C1900	Authorities for COVID-19 Guidelines and Social Distancing	CPCC-MD-SH-54505, 2.0	N
HOISTING and RIGGING			
042310	Advanced Rigging Techniques	DOE-RL-92-36	Y*
041886	Aerial Lift Inspection	CPCC-RD-SH-10972	N
043832	Aerial Lift Safety	CPCC-PRO-SH-52718	Y*
040784	Basic Crane & Rigging Safety	DOE-RL-92-36	Y*
042930	Mobile Crane Inspection	DOE-RL-92-36	Y*
042321	Mobile Crane Operation and Setup	DOE-RL-92-36	Y*
041885	Forklift Inspectors	DOE-RL-92-36	N
044470	Forklift Operational Safety	DOE-RL-92-36	Y*
044605	Equipment Operation Near Power Lines	DOE-0359	N
042870	Equipment Custodian Training	DOE-RL-92-36	N
170664	Hoisting and Rigging Manual (DOE-RL-92-36) Overview	DOE-RL-92-36	N
042860	Incidental Rigging	DOE-RL-92-36	N
042327	Load Charts and LMI Initial Training	DOE-RL-92-36	Y*
043010	Overhead Crane Electrical Inspection	DOE-RL-92-36	N
101100	Overhead Crane Manual / Electric Hoist Inspection	DOE-RL-92-36	N
042830	Overhead Crane Mechanical Inspection	DOE-RL-92-36	N
042820	Wire Rope/Rigging Hardware Inspection	DOE-RL-92-36	N
CULTURAL / ECOLOGICAL AWARENESS			
NA	Cultural / Ecological Awareness – Presentation by HMIS personnel prior to starting work	NA	N

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Hanford Course Number	Course Title	CPCCo Documents	Off-site training acceptable (Yes/No)
CONTRACTOR WELDING			
NA	Weld inspector training and qualification**	NA	Y
NA	Welder training and qualification**	NA	Y
ELECTRICAL AND ELECTRICAL SAFETY			
043870	NFPA-70E Standards for Electrical Safety	DOE-0359	Y
60038A/B	Electrician Qualification Verification Checklist	DOE-0359	N
600330	CPCCo Qualified Electrical Supervisor Checklist	DOE-0359	N
FALL PROTECTION and OTHER HAZARD RECOGNITION			
020147	Fall Hazard Recognition and Prevention	DOE-0346	Y
600058	CPCCo Competent Person Fall Protection	DOE-0346	N
020148	Fall Protection PFAS User Practical Exercise	DOE-0346	Y
600060	CPCCo Competent Person – Portable Ladder Inspector	CPCC-STD-SH-40314	N
600187	CPCCo Competent Person Fixed Ladders	CPCC-STD-SH-40314 CPCC-PRO-MN-40323	N*
00311I	Hanford Site Lockout/Tagout for Authorized Worker - Initial	DOE-0336	N
00311R	Hanford Site Lockout/Tagout for Authorized Worker - Retraining	DOE-0336	N
044373	Scaffold Safety Erector/Dismantler	MSC-PRO-WP-095	Y
044372	Scaffold Safety for Inspectors	MSC-PRO-WP-095	Y
200207	Respirable Crystalline Silica Awareness - CBT	N/A	Y
200208	Respirable Crystalline Silica – Competent Person - CBT	N/A	N

** Applicable when referenced equipment/task is performed as part of the scope.*

*** Per Contractor's QA and Training Program requirements*

1.3.1.8 CPCCo will complete on-the-job evaluations (OJE) of specific Contractor personnel when they are required by Contract.

1.3.1.9 For previous training to be acceptable for Hanford Site qualification, documented evidence shall include type and class of equipment. For qualifications not related to

equipment operation, personnel shall have documented evidence of training and experience related to an activity covered under this Contract.

1.3.1.10 Contractor shall maintain copies of personnel training records at the jobsite.

1.3.2 Site-Required Training

1.3.2.1 CPCCo General Employee Training (CGET): Mandatory for all Contractor and sub-tier Contractor personnel performing work on the Hanford Site. Previous CGET training may be acceptable. Contact CPCCo.

1.3.3 Qualification Training

1.3.3.1 Electrical work scope shall be performed by qualified electrical workers and qualified instrument specialists in accordance with DOE-0359.

1.3.3.2 Hoisting and Rigging

Hanford Site Hoisting and Rigging Manual (DOE-RL-92-36) provides the qualifications for rigging operations. The Contractor may submit employee record of equivalency (i.e., experience and union affiliation); however, they will still be required to pass a written or oral examination. Operators of cranes, forklifts, and aerial lift personnel performing rigging activities shall also satisfactorily complete an on the job evaluation (OJE).

Additional OJE's may be required as the full extent of equipment that the Contractor plans to use for the project is developed. CPCCo will inform the Contractor of needed OJEs once the equipment list is finalized and will generally perform the OJE within a few days of equipment mobilization on site.

1.3.3.3 Welding and welding inspection qualifications are identified in Quality Assurance Section 1400, 1.3.2.

Contractors may be required to follow facility specific procedures when executing the work scope. Those procedures listed below that are "checked" as applies to contract must be followed when performing this scope of work:

Applies to Contract	Document Number	Title
☒	CPCC-MP-SH-32219	10 CFR-851 CPCCo Worker Safety and Health Program Description
☒	CPCC-MP-SH–40452	Central Plateau Cleanup Company Voluntary Protection Program Plan
☒	CPCC-PRO-SH-28034	Adverse Weather
☒	CPCC-STD-SH-5894	Asbestos Controls

CPCCo Central Plateau Cleanup Company
an Amentum, Fluor, Atkins LLC

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Applies to Contract	Document Number	Title
☐	CPCC-PRO-EP-53065	Asbestos Requirements for Demolition and Renovation Activities
☐	CPCC-PRO-SH-104	Aviation Safety Program
☒	CPCC-PRO-SH-40143	Biological Hazards and Bloodborne Pathogens
☒	CPCC-POL-SH-5053	CPCCo Safety, Health, Security, Quality, and Environmental Policy
☐	CPCC-MP-TQ-011	Central Plateau Cleanup Company (CPCCo) Qualification and Training Plan
☒	CPCC-PRO-TQ-40164	Personnel Training and Qualification
☒	CPCC-00073	CPCCo Radiological Control Manual
☒	CPCC-PRO-SH-40516	Chemical Management Program
☒	CPCC-PRO-SH-32621	Closure Facilities Hazards
☒	CPCC-PRO-SH-40078	Contractor Safety Processes
☒	CPCC-PRO-SH-40498	Toxic Metals Exposure Control
☒	CPCC-PRO-SH-11166	Control of Work Hours and Working Alone
☒	CPCC-PRO-SH-52718	Elevating Work Platforms
☒	CPCC-PRO-SH-40463	Ergonomics
☒	CPCC-PRO-FP-40422	Fire Marshall Interface
☒	CPCC-STD-FP-40404	Fire Protection Program
☒	CPCC-PRO-SH-40410	Hazard Communication Program
☒	CPCC-PRO-SH-121	Heat Stress Control
☒	CPCC-PRO-FP-40421	Hot Work
☐	CPCC-GD-SH-29950	Human Performance Culpability Matrix
☒	CPCC-PRO-SH-17916	Industrial Hygiene Exposure Assessments
☒	CPCC-PRO-SH-409	Industrial Hygiene Monitoring, Reporting and Records Management
☒	CPCC-PRO-WKM-079	Job Hazard Analysis
☒	CPCC-PRO-SH-54212	Vehicle Safety Policy
☒	CPCC-PRO-SH-40479	Occupational Noise Exposure and Hearing Conservation
☒	CPCC-PRO-TP-156	Onsite Hazardous Material Shipments
☐	CPCC-PRO-TP-157	Offsite Hazardous Material Shipments
☒	CPCC-STD-SH-40518	Personal Protection
☒	CPCC-STD-SH-40314	Portable and Fixed Ladder Standard
☒	CPCC-PRO-SH-52326	Powered Industrial Forklift/Aerial Lift Pre-Use Inspection
☒	CPCC-CHRT-SH-9982	Presidents' and Employee Zero Accident Councils
☒	CPCC-PRO-WKM-14047	Pre-Job Briefings and Post Job Reviews
☒	CPCC-MP-QA-599	Quality Assurance Program
☐	CPCC-POL-SH-30646	Recreation Policy
☒	CPCC-PRO-EM-060	Reporting Occurrences and Processing Operations Information
☒	CPCC-PRO-SH-077	Reporting, Investigating, and Managing Health, Safety and Property/Vehicle Events
☒	CPCC-PRO-PM-8037	Request for Clarification or Information Process
☒	CPCC-PRO-SH-40112	Roof Assessment Process
☒	CPCC-PRO-SH-40499	Safety and Health Inspections
☒	CPCC-PRO-SH-40461	Safety Communications
☒	CPCC-PRO-SH-7085	Safety Responsibilities

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Applies to Contract	Document Number	Title
☒	CPCC-PRO-SH-40464	Safety Showers and Eyewashes
☐	CPCC-PRO-SH-105	Steam Generation and Distribution System Safety
☒	CPCC-PRO-SH-40481	Storing, Using and Handling Compressed Gases
☒	CPCC-PRO-SH-40445	Tags, Signs, & Barriers
☒	CPCC-MP-TP-40476	Transportation Program Management Plan
☒	CPCC-PRO-SH-10321	Walking/Working Surfaces
☒	CPCC-PRO-WKM-12115	Work Management
☒	CPCC-PRO-RP-387	Sealed Radioactive Source Control
☒	CPCC-PRO-RP-40401	Radiation Generating Device Control
Applies to Contractor	Requirement documents not controlled by CPCCo	Title
☒	MSC-PRO-WP-095	Scaffolding
☒	MSC-PRO-37561	Department of Transportation Federal Motor Carrier Safety Management Plan
☒	DOE-0336	Hanford Site Lockout/Tagout Procedure
☐	DOE-0342	Hanford Site Beryllium Disease Prevention Program (CBDPP)
☒	DOE-0343	Stop Work
☒	DOE-0344	Hanford Site Excavating, Trenching and Shoring Procedure (HSETSP)
☒	DOE-0346	Hanford Site Fall Protection Program (HSFPP)
☒	DOE-0352	Hanford Site Respiratory Protection Program (HSRPP)
☒	DOE-0359	Hanford Site Electrical Safety Program (HSESP)
☒	DOE-0360	Hanford Site Confined Space Procedure (HSCSP)
☒	MSC-PRO-066	Hanford Lockout/Tagout Procedure
☒	DOE-RL-92-36	Hanford Hoisting and Rigging Manual
☒	MSC-RD-8589	Hanford Fire Marshal Permits
☒	MSC-RD-FP-9717	Fire Prevention for Construction/Occupancy/Demolition Activities
☒	MSC-RD-FP-10606	Fire Protection Program Requirements
☐	HNF-RD-11227	Use of Explosives of the Hanford Site

1.4 Additional Qualifications

1.4.1 Contractors using a vehicle meeting the definition of a Commercial Motor Vehicle in 49 CFR Parts 383.5 and or 390.5 must meet all the applicable Federal Motor Carrier Safety Regulations (FMCSR) regulations in 49 CFR Parts 40, 382-385, and 387-397.

PART 2 - PRODUCTS

Not Used

SECTION 01150
TRAINING AND QUALIFICATIONS

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1 – GENERAL

1.1 SUMMARY

1.1.1 General purposes of conferences addressed in this Section are coordination, work control, and radiological direction of the Work. In addition to meetings addressed by this Section, Contractor may be required by other Sections and other Contract documents to conduct special-purpose meetings and various safety meetings and briefings.

1.1.2 CPCCo will issue meeting notices and prepare an agenda and minutes for each conference and meeting addressed in this Section. When applicable, minutes will identify action items, assigned actionees, and due dates.

1.2 SITE LABOR CONFERENCE

1.2.1 Before start of Work, Contractor shall conduct a conference at a time and Hanford Site location agreed upon by Contractor and the Labor Organization representatives.

1.2.2 Invited attendees shall include CPCCo, Contractor, subcontractors, Labor Organizations representing utilized crafts, and others having an interest in Hanford Site labor requirements.

1.2.3 Purpose of the conference is familiarization of project participants with Hanford Site labor requirements. Conference shall last approximately one hour and shall include a presentation by the Contractor of the proposed craft utilization and work plan.

1.3 PRECONSTRUCTION CONFERENCE

1.3.1 Before start of the Work, CPCCo will conduct a conference at a time and Hanford Site location agreed to by Contractor and CPCCo.

1.3.2 Invited attendees will include CPCCo, Contractor, subcontractors and others having an interest in the Work.

1.3.3 Purpose of the conference is the coordination of Work startup and familiarization of project participants with the Work and worksite. The conference will last approximately two (2) hours and will include the following agenda.

a. Certified payrolls

b. Construction Progress Meetings

c. Forms required by the Contract. CPCCo will provide reproducible masters

- Construction Daily Activity Report (A-6004-822)
- Work Release for Construction Service Organization (A-6004-967)
- CPCCo – Change Form (A-6004-820)
- Chemical Inventory Worksheet (A-6004-750)
- CPCCo Contractor Document Submittal Form (A-6004-757)
- Request for Clarification or Information (RCI) (A-6004-833)
- Craft-Specific Job Safety Analysis/Position Hazard Analysis (K-1 JSA/PHA) (A-6004-783)
- Job Safety Analysis/Activity Hazard Analysis for Subcontractors (K-2 JSA/AHA) (A-6004-784)
- Task-Specific Job Safety analysis (K-3 JSA) (A-6004-785)
- Significant Discharge Log (A-6002-387)
- Contractor – Job site safety inspection/observation checklist (A-6004-815)
- Construction Subcontractor daily safety oversight inspection checklist (CPCCo A-6006-924)

d. Material and equipment lists

e. Points of contact and key personnel representing the Contractor and CPCCo. Areas covered will include safety, quality assurance and quality control, Price Anderson Amendment Act (PAAA), acceptance inspection, and construction engineering

f. Quality requirements

g. Report requirements

h. Safety

i. Schedule requirements, schedule constraints, and work limitations

j. Submittals

SECTION 01200
PROJECT MEETINGS

1.4 CONSTRUCTION PROGRESS MEETINGS

1.4.1 Every week CPCCo will conduct a progress meeting at a time and Hanford Site location determined during the Preconstruction Conference.

1.4.2 Invited attendees will include CPCCo, Contractor, and subcontractors.

1.4.3 The purpose of the meetings is the exchange of Work-related information. Average meeting will last approximately 1½ hours and will include the following agenda items:

a. Safety
b. Quality Assurance
c. Progress
d. Submittal Status
e. Schedule, Cost and Construction Status
f. Requests For Information – Status
g. Design and Scope Changes
h. Material and Equipment Status
i. Problem Areas

1.4.4 Contractor to provide six (6) copies of 2-week look-ahead schedule for review during the meeting. Refer to Section 01315 for level of detail required on 2-week look-ahead schedule.

1.4.5 The Contractor shall complete Construction Daily Activities Field Reports (A-6004-822) (DAR) and Lost Time/Work Delay Notification (A-6006-539) if applicable. The Contractor shall provide CPCCo with a Construction Daily Activities Field Report identifying detailed work activities performed for the day: craft by name/hours worked and company, Supervision, by name/hours worked and company, any detailed problems/issues/delays, vehicles/equipment used, detailed work activities planned for the next day, Safety observations, Lost Time/Work Delay Block #14, etc. Construction Daily Activities Field Reports shall be submitted by the contractor to CPCCo by 10:00 a.m. each work day documenting the previous work day's activities. DAR's will be filled out until the project is completed or terminated. A DAR will be submitted on days where no work has been done.

PART 2 – PRODUCTS

Not Used

SECTION 01200
PROJECT MEETINGS

PART 3 – EXECUTION

Not Used

END OF SECTION

CPCco
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SECTION 01300
SUBMITTALS

PART 1 – GENERAL

1.1 SUMMARY

This Section provides the general procedures and requirements for preparing and processing submittals. Required submittals are identified in other Specification sections, other Contract sections, and the CPCCo OS/IH Manual. Required submittals are also summarized by CPCCo on the Master Submittal Register (preliminary draft included in this section). The submittal register may not be all-inclusive, and identifies documents required with proposal submittal, post-award / prior to Notice-To-Proceed (NTP), and post NTP.

1.1.1 Requests for substitutions are prepared in accordance with Section 01630 and processed in accordance with this Section. "Deliverable documents" differ from submittals and are processed in accordance with Section 01720. Deliverable documents are Quality Assurance documents and are required by technical sections of the Specification.

1.2 CLARIFICATIONS

1.2.1 Contract documents take precedence if a conflict exists between Contract documents and the submittal register. Immediately notify CPCCo of discrepancies in the submittal register.

1.2.2 Approval of a specific item does not constitute approval of a system or assembly of which an item is a component.

1.2.3 Materials and equipment that differ from approved submittals are subject to rejection and replacement at Contractor's expense.

1.2.4 Delays arising from failure to provide required submittals in a timely manner will not constitute excusable delays for extension.

1.2.5 Standard processing time of submittals by CPCCo is approximately 1 week and is measured from date of submittal's receipt by CPCCo to date of return mailing.

1.3 SUBMITTAL BY CONTRACTOR

1.3.1 The Contractor submittals identified herein on the submittal register shall be submitted to CPCCo Construction Document Control by the Contractor using the Contractor Document Submittal (A-6004-757). Instructions for completion of the submittal are included with the form.

SECTION 01300
SUBMITTALS

1.3.2 The quantity, frequency, and type of submittal shall agree with the requirements set forth on the submittal register. The submittal number shall be entered on the submittal form by the Contractor in accordance with the submittal register. This number is used to identify each submittal.

1.3.3 When any submittal is returned to the Contractor with a request to resubmit (i.e., marked as: "B-yes" "Minor Comments – Approved With Exceptions as Corrected Re-submittal Required"; or "C" "Not Approved Revise and Resubmit") the Contractor shall resubmit all corrected documents within the time specified on the returned submittal form, or if no time is specified, within 5 working days from the disposition date.

1.3.4 Contact the Contract Specialist if additional submittal numbers are required.

1.3.5 Changes to a Contractor's deliverables that have not been accepted by CPCCo as complete shall be re-submitted using the submittal form and in accordance with the Contractor's CPCCo-approved Quality Assurance Program.

1.4 SUBMITTAL REGISTER

A preliminary submittal register is provided to the Contractor at the time of proposal.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

CPCco
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SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

Master Submittal Register 105KE Safe Storage Enclosure Construction								Rev B
Submittal No.	**Type and # of Copies**	**Technical Submittal**	**Vendor Information**	**Description of Submittal**	**Submittal Date (work days)**	**Approval Organization**	**CPCCo Review Time Needed (work days)**	**Contract Paragraph or Requirement Reference**
1	APW / E /1	Yes		Erection Plan, stamped by PE qualified Engineer	Prior to work package approval	BTR / ES&H / Eng	4	Section 01010 1.3.12
2	APW / E / 1	Yes		As-found and as-left survey report(s) of the stub walls and grout infill area by a WA State Licensed surveyor	2 days after survey	BTR / Rad / Eng	4	Section 01010 1.3.5.7
3	APW / E / 1	Yes		Re-bar detailing drawings, shop drawings, construction drawings and calculations	20 days Prior to fabrication	BTR / Eng	10	Section 01010 1.3.10
4	AP / E/ 1	Yes		Field markup - as built records	1 day after affected installation	BTR / QA / Eng	4	Section 01010 1.3.21
5	APW / E / 1	No		Name of person responsible for receiving changes to design media	Award + 5 days	BTR / ENG	4	Section 01036 1.2.3
6	AP / E/ 1	No		Technical Approach for radiological soil removal and demolition work	With Proposal	BTR / RC	NA	Section 01040 1.5.2.1
7	AP / E /1	No		Designated Field Work Supervisor	With Proposal	BTR / ES&H	NA	Section 01150 1.3.1.3
8	AP / E/ 1	No		Subcontractor Listing	With Proposal	BTR	NA	Section 01150 1.3.1.1
9	AP / E / 1	No		Badge, dosimetry / bioassay request for personnel required under the various releases	8 days before mobilization of each crew	BTR / RC	3	Section 01040 1.3.2 Section 01130 1.8.2

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SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

Master Submittal Register 105KE Safe Storage Enclosure Construction								Rev B
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10	APW / E / 1	Yes		Alternate safety program (if proposed)	With Proposal	BTR / ES&H	12	Section 01110 1.2.2.1
11	APW / EFC /1	Yes		JHA/AHAs for each work package	Prior to each work package approval	BTR / ES&H / RC	4	Section 01040 1.5.2.2 Section 01110 1.2.2.3 and 1.4
12	APW / E / 1	Yes		Critical Lift Plan(s) (if used)	SC (each release) – 12 days	BTR / ENG / ES&H	10	Section 01110 1.3.13.2
13	APW / E / 1	Yes		Waste Management Plan	M – 8 days	BTR / ECO	6	Section 01130 1.2.2.1
14	AP / E / 1	No		Safety Data Sheets	5 days before mobilizing chemical to site	BTR / ES&H	4	Section 01130 1.2.2.2 Section 01130 1.10.2
15	AP / E / 1	No		Chemical Sources	M – 12 days	BTR / ES&H / WM	10	Section 01130 1.2.2.3
16	APW / E / 1	No		Chemical Inventory	M – 5 days	BTR / ES&H / WM	4	Section 01130 1.2.2.4
17	APW / E / 1	No		Air Emissions	M – 12 days	BTR / ECO	10	Section 01130 1.2.2.5
18	APW / E / 1	No		Dust Control Plan	M – 8 days	BTR / ECO	6	Section 01130 1.2.2.6

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SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

Master Submittal Register Rev B
105KE Safe Storage Enclosure Construction

Submittal No.	Type and # of Copies	Technical Submittal	Vendor Information	Description of Submittal	Submittal Date (work days)	Approval Organization	CPCCo Review Time Needed (work days)	Contract Paragraph or Requirement Reference
19	APW / E / 1	No		Radioactive Sources	12 days before mobilizing source to site	BTR / RC	10	Section 01130 1.2.2.7
20	APW / E / 1	Yes		Detailed information relative to any anticipated process involving the application of volatile chemicals (if deemed applicable)	Prior to work package approval	BTR / ECO	10	Section 01130 1.10.3
21	APW / E / 1	Yes		Training matrix	A + 5 days	BTR / ES&H	5	Section 01150 1.2.2.1
22	APW / E / 1	No		Documentation of successful completion of training	5 days before mobilization of each crew	BTR / ES&H	2	Section 01150 1.2.2.2
23	APW / E / 1	No		Documentation that all equipment operator training and qualifications are current	M – 3 days	BTR / ES&H	2	Section 01150 1.3.1
24	APW / E / 1	No		Hoisting & Rigging - employee qualifications, certifications or record of equivalency	M – 8 days	BTR / ES&H	6	Section 01150 1.3.3.2
25	AP / E / 1	Yes		Startup Project Schedule	A + 8 days	BTR / PC / PM	4	Section 01315 1.1.3.1
26	AP / P3 / 1 E / 1	Yes		Project Schedule	A + 20 days	BTR / PC / PM	8	Section 01315 1.1.3.2
27	AP / E / 1	No		Weekly work schedules (2-week look ahead)	Weekly	BTR / PC / PM	NA	Section 01315 1.1.3.3
28	AP/ P3 / 1 E / 1	Yes		Revised Schedules	When required	BTR / PC / PM	8	Section 01315 1.1.3.4

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SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

Master Submittal Register 105KE Safe Storage Enclosure Construction							Rev B	
Submittal No.	**Type and # of Copies**	**Technical Submittal**	**Vendor Information**	**Description of Submittal**	**Submittal Date (work days)**	**Approval Organization**	**CPCCo Review Time Needed (work days)**	**Contract Paragraph or Requirement Reference**
29	NA / E / 1	No		Preliminary project schedule	With proposal	BTR / PM	NA	Section 01315 1.1.4.1
30	AP / E / 1	No		Progress Report	Monthly	BTR / ENG / PM	NA	Section 01315 1.1.4.2
31	APW / E / 1	Yes		Quality Assurance Program (QAP) to include documentation that fabricator and erector maintain programs that meet AWS requirements of the Construction Specification	With Proposal	QA / BTR	12	Section 01400 1.2.2.1
32	APW/E	Yes		Certified Weld Inspector certification documentation (shop & field) VT and NDE, as required, to include visual acuity exam results.	Prior to fabrication	BTR, ENG, Welding SME, QA	5	Section 01400 1.3.2.2
33	APW/E	Yes		Welding Procedure Specification (WPS) for both shop and field welding, including Procedure Qualification Records (PQRs) for both shop and field welding	Prior to fabrication	BTR, ENG, ES&H, Welding SME, QA	5	Section 01400 1.3.2.2
34	APW/E	Yes		Welder Performance Qualification Records (WPQR), with evidence of continuity – to be submitted separately for each qualified welder (shop & field)	Prior to fabrication	BTR, ENG, Welding SME, QA	5	Section 01400 1.3.2.2
35	AP	Yes		Inspection and Test Results, including 3rd party test results when 3rd party is contracted to Construction Contractor	Within 5 days of inspection/testing	QA / BTR / ENG	4	Section 01400 1.5

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Master Submittal Register Rev B
105KE Safe Storage Enclosure Construction

Submittal No.	Type and # of Copies	Technical Submittal	Vendor Information	Description of Submittal	Submittal Date (work days)	Approval Organization	CPCCo Review Time Needed (work days)	Contract Paragraph or Requirement Reference
36	NA / E / 1	Yes		Written statement warranting that all items supplied under Contract are genuine, new, and unused	EC	BTR /ENG	4	Section 01400 1.2.3.1
37	APW / E / 1	Yes		Nonconformance / deviation reports with Use as Is and Repair disposition	Within 2 days of discovery	QA / ENG / BTR	4	Section 01400 1.7.2.1
38	AP / E / 1	Yes		Nonconformance / deviation reports with Reject or Rework disposition	Within 2 days of discovery	Information Only - QA / ENG / BTR	4	Section 01400 1.7.2.1
39	APW / EFC / 1	Yes		Completed Substitution Approval Request to CPCCo for each requested substitution	SC – 8 days	QA / ENG / BTR	6	Section 01630 1.1.2.1
40	APW / E / 1	No		Crane equipment inspection, certification and test record	Equipment M – 4 days	BTR / ES&H	4	Hoisting and Rigging Manual
41	AP / E/ 1	No		Field Inspection Records (e.g., , steel erection)	4 days after generation	BTR / QA	4	Exhibit 11
42	APW / E / 1	Yes		Concrete Mix Design (if used)	8 days Prior to pour	ENG / BTR	4	Exhibit 1 and 11
43	AP / E/ 1	No		Concrete Test Records (if used)	2 days after tests	BTR	NA	Exhibit 11
44	AP / E/ 1	No		Ground Compaction Records (if used)	Weekly	BTR	NA	Exhibit 7 and 11
45	AP / E/ 1	Yes		Daily Safety Inspections	Weekly	BTR / ES&H	NA	Section 01110 1.3.3
46	AP / E/ 1	No		Shop Fabrication Records (weld records, weld inspection records, paint inspection / thickness records, as-built records, etc.)	4 days prior to shipment onsite	QA / ENG / BTR	4	Exhibit 11

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SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

Master Submittal Register 105KE Safe Storage Enclosure Construction							Rev B	
Submittal No.	**Type and # of Copies**	**Technical Submittal**	**Vendor Information**	**Description of Submittal**	**Submittal Date (work days)**	**Approval Organization**	**CPCCo Review Time Needed (work days)**	**Contract Paragraph or Requirement Reference**
47	APW / E / 1	Y		Civil Testing Lab Certifications	8 days Prior to pour	QA / ENG / BTR	4	Exhibit 11
48	APW / E / 1	Y		Civil Testing Technician Certifications	8 days Prior to pour	QA / ENG / BTR	4	Exhibit 11

1. Typically a numerical sequence (i.e., 1, 2, 3,…). However, other numbering systems may also be used.
2. Submittal type, number of copies and format:

   APW = Approval Required Prior to Work (CPCCo must approve the Contractor's submittal prior to the Contractor being authorized to proceed with any activity/work associated with the submittal).
   AP = Approval Required (CPCCo must approve the Contractor's submittal; however, work associated with the submittal may proceed prior to CPCCo approval).
   Format: Describes the type of submittal required (electronic or printed):
   DWG An AutoCAD drawing using the Hanford standard formatting (See CPCCo-00263, *Off-Site Vendor* Instructions for *the Preparation and Control of Engineering Drawing)*.
   MFC Microsoft Format Compatible application (Word, Excel, Access, PowerPoint)
   P3 A Primavera Project Planner schedule
   GEN General or Open Format/Media
   E Electronic / PDF Adobe Acrobat (Portable Document Format)
3. Technical submittals are Engineering or Quality affecting submittals. A Yes in this column designates the need for formalized comments, and a formalized comment disposition process by the Contractor. Examples of Technical Submittals would include Engineering or Fabrication Drawings, or Certificates of Conformance.

SECTION 01300A
PRELIMINARY SUBMITTAL REGISTER

4. Vendor Information for project record purposes.
5. Description / Document Title. Describe submittal.
6. Required submittal date or its relationship to project milestones. Examples are July 14, 2019, or Award + 15 days, Contract Completion +30 days.

A	Date of Award
CD	Conceptual Design Complete
PD	Preliminary Design Complete
FD	Final Design Complete
M	Mobilization
SC	Start of Construction
EC	End of Construction

7. Approver Organization. Examples are Construction Manager, Safety, Quality, Radiation Protection, Waste Management.
8. The number of Work Days required for review of the submittal.
9. Contract Reference: Cross reference to the Contract requirement that defines this submittal:

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS, AND PROJECT PERFORMANCE MILESTONES

PART 1 – GENERAL

1.1 SCHEDULES

1.1.1 Schedule Preparation

1.1.1.1 Prepare schedules using commercial project planning software. Preferred software (used by CPCCo) is Primavera Project Planner (P6). Other project planning software may be used if Contractor provides software translation capability to and from Primavera.

1.1.1.2 The P6 Activity Code Structure and Work Breakdown Structure (WBS) to be used in preparation of the Construction Schedule is 041.02.22.01, which will enable communication /integration of the Contractor's schedule with CPCCo schedules.

1.1.1.3 Identify initial Project Schedule as Revision 0. This schedule, when approved, is the baseline project schedule.

1.1.2 See Section 01300 for submittal process.

1.1.3 Approval Required

1.1.3.1 Startup Project Schedule: 8 working days after Notice of Award, submit a schedule covering activities for the first 60 days of the Contract, starting with receipt of Notice to Proceed, as specified in 1.2.

1.1.3.2 Project Schedule: 20 working days after Notice of Award, submit a schedule covering activities for duration of Contract.

1.1.3.3 Weekly Work Schedules: Provide a 2-week "look ahead" schedule, updated weekly, one day prior to each scheduled Weekly Progress Meeting (1.4.1).

1.1.3.4 Revised Schedules: When required, submit revised project schedules as specified in 1.3.

1.1.3.5 Downtime/delay reports: On a daily basis or on the working day of an occurrence, submit downtime/delay reports.

1.1.4 Approval Not Required

1.1.4.1 Preliminary Project Schedule, with Proposal, shall include all planned mobilization, work scope and demobilization activities.

1.1.4.2 Progress Reports: One month after submittal of project schedule, and monthly thereafter, submit a progress report as specified in 1.5.

1.2 SCHEDULE PREPARATION

1.2.1 The schedule submittal shall include a time-phased performance measurement baseline schedule (PMBS) for completing the individual construction Work.

1.2.2 The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the contract period of performance. Identify critical path activities, including logical sequence and relationship of activities for engineering, design, submittals, procurement, fabrication, delivery, erection, installation, and testing for work covered by Contract.

1.2.3 Specific Milestones to be shown on the Project Schedule are:

1.2.3.1 Mobilization(s)

1.2.3.2 Work Package Approval(s)

1.2.3.3 Receive Approval of Shop Drawings

1.2.3.4 Start and End of Shop Fabrication Work

1.2.3.5

1.2.3.6 Secure Elevators and Counterweights

1.2.3.7 Cleanup of sides of building (Removal of ladders, etc.)

1.2.3.8 Structural Steel Installation (including vestibule and stairs) Complete

1.2.3.9 Siding & Roofing Installation Complete

1.2.3.10 Electrical Installation & Testing Complete

1.2.3.11 Construction Acceptance

1.2.3.12 Demobilization(s)

1.2.4 See submittal register for copy types to be submitted and approval code.

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS, AND PROJECT PERFORMANCE MILESTONES

1.3 SCHEDULE REVISIONS

1.3.1 Whenever CPCCo determines that there are significant variances between actual and scheduled progress, endangering completion of the Contract Work within the scheduled time, the Contractor may be required to prepare and submit revised project schedules including corrective action plan(s).

1.3.2 Make schedule revisions in accordance with the following:

1.3.2.1 Show progress to date of submittal and projected completion dates for each activity.

1.3.2.2 Identify activities modified since the previous submittal, major changes in scope, and other identifiable changes.

1.3.2.3 Provide a narrative report defining the problem areas, anticipated delays, and schedule impacts.

1.3.2.4 Describe corrective action taken, or proposed, and its effect, including changes in schedules of subcontractors.

1.3.3 Send copies of revised schedules to CPCCo. Notify subcontractors, suppliers, and other concerned entities, instructing them to promptly report, in writing, problems anticipated due to revisions.

1.3.4 Upon approval, a revised schedule becomes the new baseline.

1.4 WEEKLY WORK SCHEDULE PREPARATION

1.4.1 Each week, prepare a detailed schedule of the next 2-week's work. Base weekly work schedules on the activity schedule. Include the following:

a. Work Description
b. Location of the Work.
c. Work involving outages, overtime, weekends, etc.

1.5 PROGRESS REPORT PREPARATION

1.5.1 Prepare a summary progress report each reporting period, show actual progress versus scheduled progress. Scheduled progress is given by baseline project schedule. Show actual progress in the form of percentages completed for activities or resources.

1.5.2 A variance analysis shall be prepared on the current month and cumulative to date, and shall include cause, impact, and corrective action. Variance analysis shall include explanations, as required, to adequately address problems.

1.5.3 Develop and include a line graph ("S" curve) to show cumulative actual progress versus cumulative scheduled progress. Progress shown shall be consistent with that indicated by the reports.

1.5.4 Update project schedule each reporting period, or more frequently if requested by CPCCo, when progress report is prepared. Include an updated electronic and a hard copy of updated schedule with the progress report.

1.5.5 Progress of scheduled activities will be used to determine monthly progress payments made to the Contractor. Requests for progress payments shall be directly related to progress shown in relation to the approved baseline project schedule.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01400
QUALITY ASSURANCE AND CONTROL

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this Section unless otherwise indicated.

1.1.1.1 American Society of Mechanical Engineers (ASME)

NQA-1: 2009	Quality Assurance Program Requirements for Nuclear Facility Applications. Include Requirements 1 through 18, subparts 2.7 and 2.14 as applicable for the scope of work being performed.

1.1.1.2 American Society for Quality (ASQ)

E4	Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs

1.1.1.3 Code of Federal Regulations (CFR)

Title 10	Energy
Part 830, Subpart A	Quality Assurance Requirements
Title 29	Labor
Part 1910	Safety and Health Regulations for General Industry
Part 1926	Safety and Health Regulations for Construction

1.1.1.4 Department of Energy (DOE)

Process Guide	Identification and Disposition of Suspect/Counterfeit items or Defective items
DOE-0359	Hanford Site Electrical Safety Program (HSESP)

1.1.1.5 Factory Mutual (FM)

Approval Guide

1.1.1.6 Institute of Electrical and Electronics Engineers (IEEE)

C2	National Electrical Safety Code (NESC)

1.1.1.7 International Standards Organization (ISO)

ISO 9000:2000	Quality Management and Quality Assurance Standards

1.1.1.8 Intertek Testing Services NA, Inc. (ITSNA)

ETL, Section 1	Electrical Products/Gas/Oil Fueled Products

1.1.1.9 National Electrical Manufacturers Association (NEMA)

MG-1	Motors and Generators

1.1.1.10 National Fire Protection Association (NFPA)

70-2017	National Electrical Code (NEC)

1.1.1.11 Underwriters Laboratories (UL)

Electrical Appliance and Utilization Equipment Directory

Electrical Construction Materials Directory

1.1.1.12 American Welding Society (AWS)

QC-1 Specification for AWS Certification of Welding Inspectors

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required

1.2.2.1 With proposal, submit a Quality Assurance Program (QAP) meeting the requirements of the Contract and this Section. Include subcontracted work and work performed off of the Hanford Site. If QAP is based on a consensus national standard or other quality

management system, furnish a matrix showing the cross-references between the QAP and the standard or system. Include Steel Fabricators and Steel Erectors weld programs: WPS, PQR, WPQR, Welder Continuity logs, and Material & rod control procedures as a minimum.

1.2.2.2 Current AWS Certified Welding Inspector VT and NDE certificates and current and valid visual acuity examination for supplier performing weld inspections.

1.2.2.3 Welder certifications for both shop and field welding.

1.2.2.4 Weld inspection procedure for both shop and field welding.

1.2.2.5 Other inspections required by Code and or the Construction Specification, e.g., concrete, structural steel, compaction and soil grading (Exhibit 11).

1.2.3 Approval Not Required

1.2.3.1 At the end of construction, submit a written statement warranting that all items supplied under Contract are genuine, new, and unused in accordance with 1.4.

1.3 QUALITY ASSURANCE PROGRAM REQUIREMENTS

1.3.1 The Quality Assurance Program (QAP) requirements imposed by this Specification are under the authority of the Price Anderson Amendments Act (PAAA) of 1989. Quality assurance provisions are developed from U.S. Department of Energy Nuclear Safety Management Regulation 10 CFR 830.120. QAPs developed from other national standards (e.g., ASME NQA-1, 10 CFR 50, ISO 9000, ASQ E4) may be used as a basis for satisfying the criteria specified, and should be supplemented and submitted as necessary to satisfy the requirements.

The quality level for the fabrication, installation and testing of the SSE is Quality Level 3.

1.3.2 The QAP shall apply to all activities, including subcontracted activities and for work performed off the Hanford Site. The QAP shall include provisions for the following:

1.3.2.1 Management: Program, training/qualification, discrepancy identification, document/records.

a. Quality documents shall describe the organizational structure, functional responsibilities, levels of authority and interfaces for those managing and performing the Work.

b. Personnel shall be trained and qualified to ensure they are capable of performing their assigned work. Plans shall address specific training, qualification, and certification requirements.

c. Items and processes that do not meet the requirements shall be identified, controlled, and corrected. Identify items or materials that do not meet specified requirements and control them to prevent inadvertent use, shipment, or intermingling with acceptable materials or items.

d. Documents shall be prepared, reviewed, approved, issued, revised and maintained. Approved and current issues of design documents, applicable submittals, procedures, procurement documents and instructions shall be used. Records shall be legible, identifiable, and retrievable.

1.3.2.2 Performance: Work Processes, Design, Procurement, Inspection, and Testing

a. Items shall be identified and controlled to ensure proper use. Items shall be maintained to prevent their damage, lost or deterioration.

b. Purchased items and services shall meet established requirements and perform as specified. Procurement controls shall include actions to prevent the use of suspect or counterfeit products (1.4).

c. Contractor shall be responsible for the performance of all inspection and testing activities as specified in the CPCCo Quality Assurance Inspection Plan. Inspection and testing of specified items and processes shall be conducted using established acceptance and performance criteria.

1. Perform and document inspections and testing required by the Construction Specification (Exhibit 11). Documented inspections shall report the true and physical/functional condition of the inspection activity. As a minimum prepare daily reports when inspections and testing are performed. Reports shall provide sufficient detail to describe inspections and testing performed, with applicable requirements referenced, and results and determinations of inspections and tests shown.

2. Test procedures, when required, shall include the reference test objectives, prerequisites, and acceptance criteria. Test procedures shall also identify test configuration, safety instructions, instrumentation requirements, required monitoring, and environmental conditions. Test procedures from standards, codes, supplier manuals and equipment maintenance instructions may be used in lieu of specially prepared test procedures.

3. Submit results of required inspections and tests.

4. Measuring and Test Equipment (M&TE) shall be properly calibrated maintained, accounted for and used when required. Calibration shall be traceable to National Institutes of Standards and Technology Calibration (NIST) Standards. Perform calibration at specified intervals based on the type of equipment, required accuracy, and frequency of use, stability characteristics, and other conditions affecting performance. Maintain records and mark equipment to show calibration status.

5. When M&TE is found to be out of calibration, specify means to identify its use since the last calibration and methods to re-verify acceptability of items previously tested.

6. Calibration shall have accuracy traceable to national standards (where they exist), and calibration standards shall have the accuracy to ensure that the M&TE has the required tolerances.

d. Supplier personnel performing weld inspections shall be certified as a Certified Weld Inspector (CWI) in accordance with the requirements specified in AWS QC-1. The following documentation shall be submitted prior to the start of fabrication: Current AWS CWI certificates, current and valid visual acuity examination, and visual weld inspection procedures. Approval shall be obtained from the Buyer prior to start of fabrication.

e. Welding procedures and personnel shall be qualified in accordance with the applicable AWS specifications/code as specified in the Purchase Order/Contract order. The Supplier shall submit copies of all welding procedure specifications (WPS), Procedure Qualification Records (PQRs), and Welder Performance Qualification Records (WPQRs), welder continuity logs and material/rod control procedure(s) to be employed in the performance of this Purchase Order/Contract Order. Buyer approval is required prior to the start of fabrication.

f. Changes and revisions to welding documentation shall be submitted to the Buyer for review and approval prior to use. When subcontracting any portion of this Purchase Order/Contract Order, the Supplier is required to invoke the applicable quality assurance program requirements on the subcontractor.

g. These requirements shall be flowed down to any subcontractors as applicable.

1.3.3 Electrical/Electronic Product Acceptability

1.3.3.1 Electrical control panels and electrical equipment (a general term to include material, fittings, devices, appliances, luminaries [fixtures], apparatus, and the like used as part of or in connection with an electrical installation) delivered or brought onto the Hanford Site in performance of this Contract shall be listed or labeled by an organization currently recognized by OSHA as a nationally recognized testing laboratory (NRTL) in accordance with DOE-0359.

1.3.3.2 Electrical equipment installed as part of this contract shall comply with the NEC and, where applicable, the NESC. CPCCo reserves the right to inspect electrical equipment and installations. Contractor shall notify CPCCo when installations are available for NEC inspection.

1.4 EXCLUDING SUSPECT AND MISREPRESENTED PRODUCTS

1.4.1 Contractor warrants that items provided to CPCCo are genuine and unused unless otherwise specified in writing by CPCCo. Contractor further warrants that items used during the performance of the Work include genuine, original, and new components, or are otherwise suitable for the intended purpose. The Contractor indemnifies CPCCo, its agents, and third parties for any financial loss or property damage resulting directly or indirectly from material, components, or parts that are not genuine, original, and unused, or otherwise suitable for the intended purpose. This includes materials that are defective, suspect, or counterfeit; materials that have been provided under false pretenses; and materials or items that are materially altered, damaged, deteriorated, degraded, or result in product failure.

1.4.2 Types of material, parts, and components known to have been misrepresented include fasteners; hoisting, shackles, turnbuckles, cable clamps, wire rope, rigging, and lifting equipment; cranes; hoists; valves; pipe and fittings; electrical equipment and devices; plate, bar, shapes, channel members, and other heat-treated materials and structural items; welding rod and electrodes; and computer memory modules. The Contractor's warranty shall also extend to labels and trademarks or logos affixed, or designed to be affixed, to items supplied or delivered to CPCCo. In addition, because falsification of

information or documentation may constitute criminal conduct, CPCCo may reject and retain such information or items, at no cost; and identify, segregate, and report such information or activities to the DOE.

1.4.3 Contractor shall submit a written statement that "all items furnished under this Contract are genuine (i.e., not counterfeit) and match the quality, test reports, markings, and fitness for use required by the Contract." The statement shall be on Contractor letterhead and signed by an authorized agent of Contractor.

1.4.4 Any materials furnished as part of this Contract that have been previously found to be suspect/counterfeit by the DOE will not be accepted. For more information about suspect/counterfeit items, refer to Process Guide for the Identification and Disposition of S/CI or defective items at the following link: http://www.hss.doe.gov/sesa/corporatesafety/sci/guide.html

1.5 INSPECTION AND TESTING

1.5.1 Inspection, testing, and documentation addressed under the Field Inspections and Test articles in this Statement of Work shall be performed by qualified Quality Control personnel who are independent of the work being performed. Quality Control personnel shall have been trained and qualified in accordance with the approved QAP.

1.5.2 Inspection and testing shall be performed in accordance with this Statement of Work.

1.5.3 CPCCo may perform oversight and inspections to verify compliance to requirements.

1.5.4 Verifications shall be performed for specific verification points as scheduled in the CPCCo Inspection Plan.

1.5.5 Prerequisites to verification points: Ensure that personnel have completed inspections of, and approved portions of, work in accordance with the Specification requirements before notifying CPCCo.

1.5.6 ACI, AWS, other Code or Construction Specification verification points will be included in the work packages. A typical list of verification points are defined as follows:

- **QA Hold Point:** A type of signature step in a technical work document that satisfies established criteria for designation of Hold Points at which specific personnel are required to sign for the specified action. Hold Points consist of an

action; acceptance criteria for Hold Point completion; and blocks for signature of performer, printed name of performer, and date.

QA Hold points are placed at those steps where omission or incorrect accomplishment of the step could result in a significant problem or hazard. The completion and documentation of a Hold Point must occur prior to proceeding to the next working step.

- **Verification Point:** A step in an inspection plan, procedure, or other work document that requires inspection personnel to review, inspect, test, check, or otherwise determine and document whether or not items, processes, services, or documents conform to specified requirements.

- **Witness Point:** A step in an inspection plan, procedure, or other work document that requires inspection personnel to observe an activity (e.g., examination or test).

NOTE: *"Verification" may be performed **after** the fact; "witness" is performed **during** the work process.*

- **Radiological Control Hold Point:** A hold point that is used when the potential exists in which incorrect implementation of radiological controls could exceed one or more of the following criteria:

  - Radiation exposures in excess of Administrative Control Levels
  - High airborne radioactivity concentrations without protection or controls
  - The uncontrolled release of radioactive contamination

1.6 COMMERCIAL GRADE ITEM PROCUREMENT

1.6.1 Contractor shall purchase and dedicate commercial grade items in accordance with approved QAP as needed.

1.7 DEFICIENCY REPORTING

1.7.1 Utilize a deficiency reporting system (e.g. nonconformance/deviation reports) to document deviations from requirements. Deficiency reports shall have a recommended disposition and shall be formally submitted to CPCCo within 48 hours of discovery.

1.7.2 Dispositions of deficiency reports shall be documented in one of the four following categories: Use-as-is; Reject; Repair; or Rework. Definitions for these categories may be found in ASME NQA-1.

1.7.2.1 Use-as-is and repair deficiencies shall be submitted for concurrence and approval. Reject and rework deficiencies shall be submitted for information. After the recommended disposition has been evaluated by CPCCo, the form will be returned to the Contractor with a disposition of "approved" or "rejected." The Contractor shall take corrective action on the nonconformance only after the form is approved. The Contractor's completed nonconformance form shall be shipped with the affected item.

1.7.2.2 Deficient items described by the report shall be physically tagged with a deficiency tag or segregated, when feasible.

1.7.2.3 Deficiency tagging shall remain intact during correction of deficient conditions, unless tagging inhibits directed corrective action. If removal of tag is necessary to accomplish directed corrective action, removal shall be performed or delegated by the initializing organization.

1.7.2.4 Clearance of deficiency tags shall be performed or delegated by the initializing organization.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of the Contract to the extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 National Fire Protection Association (NFPA)

701	Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

1.1.1.2 Department of Transportation

49CFR171-180	Packaging & Shipment of Hazardous Materials (Contractor's radiation source material)

1.1.1.3 Washington State Department of Transportation (WSDOT)

M 41-10	Road, Bridge, and Municipal Construction

1.2 ACCESS AND PARKING

1.2.1 Parking for a limited number of Contractor's company vehicles will be made available near worksite, outside of any Limited area. "No Parking" signs are posted to show fire and emergency lanes. No on-street parking will be permitted.

1.2.2 First Aid: Facilities for first line medical attention are available onsite and are located at the 2719WB building located in the 200 West Area of the Hanford Site. Facilities for radiological decontamination are also available onsite and are located at the 272AW building in the 200 East Area.

1.2.3 Operation and Storage Areas: Worksite operations, including soil stockpiles and laydown areas for materials, shall be designated by CPCCo during the preconstruction conference. Preliminary locations for planning purposes are provided on Exhibit 9.

1.3 FIELD OFFICE

1.3.1 A double wide Field Office /craft break trailer and restroom trailer shall be provided for the Contractors use at no cost during the onsite Construction period.

1.3.2 Combustible Controls shall be established and enforced in, around the Contractors trailer, and within the 105KE building and SSE.

Contractor trailer area – combustible debris and waste materials shall be routinely removed from the Contractors trailers and area to minimize combustible loading to as low as reasonable.

105KE building and SSE – When reasonably feasible, combustible packaging should not be taken into the 105KE building or SSE. Transient combustibles are permitted during work performance but shall be removed on a daily basis after work is completed.

1.4 TEMPORARY UTILITIES

1.4.1 Electric Power for Construction Work: Not available at the 105KE building. Provide generator set for construction power tools. Limited power is available from a staged generator to provide lighting inside the 105KE building.

1.4.2 Electric Power for construction / break trailer and rest room trailers is provided at no cost to the Contractor.

1.4.3 Sanitary Facilities will be provided and service chemical or other approved sanitary toilets for employee use is provided at no cost to the Contractor.

1.4.4 Telephone: Utilities for telephone service are not available. Contractor shall provide cellular phone for emergencies and communication with CPCCo.

1.4.5 Water: Drinking water is not available. Contractor shall provide employees with adequate drinking water that meets health and safety requirements.

1.5 TEMPORARY CONTROLS

1.5.1 Dust Control: Maintain work areas to prevent hazard or nuisance to others. Accomplish dust control by sprinkling or other methods approved by CPCCo. Repeat sprinkling at necessary intervals to keep disturbed area damp. Keep sufficient equipment on worksite to accomplish dust control as work proceeds and whenever dust nuisance or hazard occurs. No separate or direct payment will be made for dust control and cost shall be considered incidental to and included in the Contract price. Care will be taken to minimize ponding of dust suppression water on the north side of 105KE due to prevent migration of subsurface contamination to the groundwater.

1.5.2 Vehicle and equipment movement

a. Slow moving vehicles and equipment shall not travel on the Hanford Site roads during heavy traffic periods between 5:00 and 8:30 a.m., and 3:30 and 5:30 p.m.

b. Do not block existing roads.

c. Do not park on roadway shoulders.

d. Vehicles that require a portable fire extinguisher in accordance with CPCC-PRO-SH-40078, Appendix F, shall have the extinguisher secured in an approved manner (vehicle mounting bracket designed for specific extinguisher, or stowed in a secured equipment container).

1.5.3 Traffic Control: Temporary traffic control and barricades shall be in accordance with WSDOT M 41-10, Section 1-07.23.

1.5.4 Oversized vehicles and loads:

a. Obtain a Hanford Site Oversize/Overweight Permit from CPCCo before movement of oversize loads. See Section 01065. Verify route suitability and limitations before applying for the permit.

b. Display oversize load sign on the front of the towing vehicle and on the rear of the trailing unit. Attach red flags to each corner.

c. Travel between 8:30 a.m. and 3:30 p.m. unless special arrangements are made. Comply with escort vehicle requirements in the permit during travel.

d. The columns and roof trusses are very large pieces. The design drawings show the roof trusses to be fabricated in three sections. The specific scheme for column fabrication and placement has not yet been determined. The design drawings allow splices to be placed in the columns. Columns will require at least one splice along their length and the roof trusses will need to be shipped in three pieces in order to ship them on public roads.

e. Overhead electrical line transportation requirements: Notify CPCCo when equipment or hauled equipment/loads will be equal to or greater than 14 feet in height. MSA Electrical Utilities will need to be contacted and an Equipment in Transit LAB determination will be made per DOE-0359. In addition, an oversize/overweight permit (A-6003-609) will be required. Notify CPCCo at least one working work week before equipment will be brought on site. Electrical escorts will be provided by CPCCo, if deemed necessary.

1.5.5 Fuels and Lubricants:

a. Oils, greases and similar materials shall be stored in non-flammable bins or buildings or in a fenced compound remote from other combustible materials as approved by CPCCo.

b. "No smoking" signs shall be provided by Contractor and prominently displayed in areas where flammable materials are stored. Additionally, Contractor shall provide and maintain suitable fire extinguisher in such areas.

c. Contractor shall provide all fuel for heating, ventilation and air conditioning of Temporary Facilities (excludes CPCCo provided facilities/trailers).

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01610
MATERIAL AND EQUIPMENT
DELIVERY, STORAGE, AND HANDLING

PART 1 – SUMMARY

1.1 SUMMARY

This section contains requirements for delivery, inspection, marking, storage, and handling. Product-unique requirements are contained in other sections. Chemicals shall be handled, stored, and tracked in accordance with Section 01130; flammable/combustible liquid storage shall be managed in accordance with Section 01130.

1.2 DELIVERY

1.2.1 Provide equipment and labor required for unloading, transporting, and handling delivered products.

1.2.2 Safety Data Sheets (SDSs) shall be kept accessible at each jobsite where material is stored. See Section 01130.

1.2.3 All materials that are defined by the DOT as a Hazardous Material in 49 CFR 171.8, including radioactive sources, must be packaged and shipped in full compliance with the DOT regulations Parts 171-180.

1.3 RECEIVING INSPECTION

1.3.1 Arrange for immediate disposal and replacement of products found to be defective, damaged beyond repair, or in otherwise unacceptable condition.

1.3.2 Perform standard inspections and additional inspections required by this Statement of Work.

1.3.3 Dry and clean products that have become wet or have accumulated foreign substances during shipment, but have not become damaged.

1.3.4 Perform additional identification marking of products when necessary to meet requirements of this Statement of Work.

1.3.5 CPCCo may inspect products, product marking and storage methods for compliance with this Statement of Work.

SECTION 01610
MATERIAL AND EQUIPMENT
DELIVERY, STORAGE, AND HANDLING

1.4 PRODUCT IDENTIFICATION AND SEGREGATION

1.4.1 Provide identification tags or markings for products of similar appearance, or intended for similar use, procured to different specifications, or from different manufacturers. Stainless steel items shall be segregated from carbon steel items.

1.4.2 As applicable, include the following information on tags: Manufacturer's name; product brand name; specification number; product type, grade and class; and other information required by other sections of this Statement of Work.

1.4.3 Segregate tagged or marked products and provide separate storage for each product.

1.4.4 Preserve identity of bulk and lot products during storage and in-process work.

1.4.5 Control identification and storage of welding materials in accordance with a written filler metal control procedure. Maintain procedure at jobsite. Procedure shall specify methods for control by heat or lot number during storage and in-process work and for disposal of contaminated and partially used material.

1.4.6 When pipe and tube is removed from storage and prior to cutting, clearly and permanently re-mark remaining pieces with either original markings or field code identification symbols. Return pipe and tube to storage after re-marking.

1.4.7 On pipe and tube, use permanent marking methods such as indelible ink, crayon, paint, and paint stick. Vibratory etching equipment may be used with approval of CPCCo. Marking with steel stamps is not acceptable.

1.5 STORAGE

1.5.1 Store packaged products in original, unbroken packages and containers. Leave seals and labels intact.

1.5.2 Store rolled products in upright position.

1.5.3 Store products with finished surfaces in manner that prevents surface damage.

1.5.4 If contact between products could result in damage or reduction of utility, store products far enough apart to prevent contact. If close proximity storage is necessary, provide a barrier between products. Care shall be taken to preclude carbon and halide contamination of stainless steel products.

1.5.5 Keep ports, nozzles, ends, and other openings on equipment, tanks, pipe, and tube capped or plugged during storage.

1.5.6 Follow manufacturer's storage recommendations.

1.5.7 Remove, dispose of, and replace products with expired shelf-life dates. Dispose of hazardous products in accordance with Section 01130.

1.6 INDOOR STORAGE

1.6.1 Provide indoor storage for products that can be damaged by, or can deteriorate from, changes in temperature and relative humidity.

1.6.2 When required by this Specification, or when recommended by product manufacturer, provide environmentally controlled storage. Maintain temperature 60 to 70°F, relative humidity below 55%, and provide ventilation.

1.7 OUTDOOR STORAGE

1.7.1 The Contractor will construct a laydown area for staging materials and equipment to avoid congestion around the work areas and facilitate loading/unloading.

1.7.2 Avoid ground contact by providing skids, pallets, platforms, and other supports.

1.7.3 Provide sunshade protection for products that can be damaged by, or can deteriorate from, exposure to sunlight.

1.7.4 Provide weatherproof covers for products that can be damaged by, or can deteriorate from, contact with rain, snow, ice deposits, and blowing sand and debris.

1.7.5 Arrange stacked products so that condensation drains.

1.8 HANDLING

1.8.1 Provide handling tools and equipment, and use methods designed to prevent occurrence of following.

a. Impact, rubbing, and other contact damage to ends and surfaces of pipe, tube, and other cylindrical products, and to edges, corners, and surfaces of panel, sheet and other flat products.

b. Twisting, racking, and other distortion of prefabricated structures and equipment assemblies.

c. Tearing, puncturing, and breaking of wrappings, coverings, and seals on packages and cartons.

d. Surface contamination of stainless steel products.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

CPCco Central Plateau Cleanup Company an Amentum, Fluor, Atkins LLC

SECTION 01630
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 – GENERAL

1.1 SUBMITTALS

1.1.1 See Section 01300 for submittal process.

1.1.2 Approval Required

1.1.2.1 Before starting Work or material delivery to the worksite, submit a completed Substitution Approval Request to CPCCo for each requested substitution.

1.1.3 Approval Not Required: None

1.2 CONDITIONS

1.2.1 Products include those identified in this Statement of Work, in the Specifications or other contract documents, and on the Drawings. References in the Specifications to products, or to patented or proprietary processes, by trade name, make, or catalog number, shall be regarded as establishing a standard of quality, and shall not be construed as limiting competition. The following conditions and limitations apply:

1.2.1.1 Substitution requires approval of a CPCCo Change Form (A-6004-820).

1.2.1.2 Substitution shall be applied to the total quantity of the product required in the Statement of Work. Partial quantity substitutions are not acceptable.

1.2.1.3 Approval of fabrication drawings and other design media does not constitute approval of substitute products identified within the media.

1.2.1.4 Submittals required for a specified item are also required for an approved substitute.

1.3 CHANGE FORM PREPARATION

1.3.1 Using the CPCCo Change Form, identify addressed product by the Statement of Work or Specification section and article or paragraph numbers or by the Drawing number. Provide manufacturer's name and address, trade name, and model or catalog number. List fabricators as appropriate.

1.3.2 Attach descriptive information to define the operational and physical characteristics of the specified substitute product and to provide a basis for comparison. Include drawings, calculations, and data as appropriate.

1.3.3 Provide an itemized comparison between the proposed substitute and the original specified product. Include the following information:

1.3.3.1 Applicable Statement of Work or Specification section and article or paragraph numbers or applicable Drawing number.

1.3.3.2 Quality and performance comparison. List variations.

1.3.3.3 Cost data. Show the net Contract price change.

1.3.4 List the availability of maintenance service and replacement materials.

1.3.5 State the effect of the substitution on the schedule and identify the changes required in other work or products. Submit drawings, calculations, and vendor data to show the revisions necessary to accommodate the substitution.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01670
CONSTRUCTION ACCEPTANCE TESTING

PART 1 – GENERAL

Not Used

1.1 REFERENCES: Not Used

1.2 SUBMITTALS: Not Used

1.3 SUMMARY

1.3.1 This Section covers preparation of an Acceptance Test Plan (ATP).

1.3.2 An ATP is a step-by-step procedure for performing acceptance (functional) testing to demonstrate that a system operates in accordance with design requirements. It includes provisions for recording test results (test reporting). It does not cover final adjustments for operation.

1.3.3 CPCCo will prepare an ATP to demonstrate electrical system operation and deliver it to the Contractor for execution.

1.3.4 A qualitative "lights out" inspection of the SSE interior during daylight hours is also planned. This type of inspection has been used on previous ISS project to identify possible weather, animal and significant insect intrusion points. See Exhibit 2 in Section 01010 Paragraph 1.4 for a copy of the Functional Design Criteria that includes the acceptance criteria for building tightness.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

SECTION 01670A
CONSTRUCTION ACCEPTANCE TESTING
EXAMPLE

NOT USED

CPCco
Central Plateau Cleanup Company
an Amentum, Fluor, Atkins LLC

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.1 SUMMARY

1.1.1 Hanford Site work requires that certain documents, defined herein, be used to record construction process and administration of the Contract. CPCCo will assemble pertinent data for final disposition.

1.1.2 Some data required for project records shall be delivered to CPCCo during the course of construction and contract administration, while other data shall be assembled after completion of construction for delivery to CPCCo.

1.1.3 Certain information for project records shall be recorded on CPCCo-provided forms. These forms are identified in Specifications sections where required. Copies will be supplied during the Preconstruction Conference (see Section 01200) and are also available on the CPCCo web site at the following link: https://chprc.hanford.gov/page.cfm/CPCCoSafetyReferenceDocuments.

1.1.4 Project Record Documents, required by Contract, shall be prepared, preserved and delivered to CPCCo. These deliverable documents are in addition to submittals required by Section 01300.

1.2 PROCEDURE

1.2.1 Identification and Marking: Mark documents that will become project records before use for construction. Upon completion, identify documents by title or number.

1.2.1.1 Notes or markings added by hand shall be legible, utilizing permanent non-smearing marking media, such as ink or felt tip markers, in contrasting color.

1.2.1.2 Mark items to record actual construction, including changes to dimensions and details, manufacturer's name, catalog number and substitute products.

1.2.2 Availability: Keep copies of Project Record Documents at the Project site and make available to CPCCo during the progress of the Work.

1.2.3 Storage: Store one (1) set at the Project site, apart from documents used in construction and maintain in a clean dry and legible condition.

1.2.4 Delivery: Record delivery of documents by retaining copies of letters of transmittal itemizing delivered items and reports delivered during the course of the Work. Retain until construction completion. An alternate means, acceptable to CPCCo, may be used.

SECTION 01720
PROJECT RECORD DOCUMENTS

1.3 ACTIVITY AND ADMINISTRATIVE DOCUMENTS

1.3.1 Deliver or retain in accordance with the following:

1.3.1.1 Certified Payrolls: Deliver certified payrolls as required by the Contract Provisions to CPCCo. Progress payments will not be processed unless certified payrolls for work periods have been received by CPCCo. The process of reporting certified payrolls has been streamlined using an integrated electronic Certified Payroll submittal system, LCPtracker. LCPtracker eliminates the need for manual submittals and is capable of supporting integration from multiple payroll systems. All Certified Payrolls, including lower tier subcontractors, shall be submitted by entry into LCPtracker. Information can be found on LCPtracker's website: LCPtracker.com

1.3.1.2 Construction Daily Activity Report (A-6004-822): Before noon each day, deliver to CPCCo one copy of an activity report, covering labor and supervision of Contractor and subcontractors for the previous day. The report shall include a general description of the Work performed, and a list of major items of equipment that are onsite.

1.3.1.3 Subcontracting Plan Reports: Deliver reports to CPCCo documenting conformance with the approved Subcontracting Plan, as required by the Contract Document Part IV, Special Provisions – On-Site Services SP-11 (if applicable).

1.3.1.4 Pre-Job Briefing Checklist: Prepare checklist during each pre-job briefing and post-job review. Deliver checklists to CPCCo within 5 days after briefing.

1.3.1.5 Pour Slips: After obtaining CPCCo approval of Concrete Pour Slips, deliver copies to CPCCo and retain Contractor copies until Contract closeout. After closeout, deliver to CPCCo.

1.3.1.6 Trip Tickets: Deliver copies to CPCCo with each truckload of concrete and retain Contractor copies until Contract closeout. After closeout, deliver to CPCCo.

1.4 CONSTRUCTION, QUALITY ASSURANCE AND SUPPORTING DOCUMENTS

1.4.1 Deliver in accordance with the following, when called for in the Specification Sections:

1.4.1.1 Significant Discharge Log: Log water discharged each workday and deliver discharge log (A-6002-387) to CPCCo.

1.4.1.2 Flushing Records: Deliver to CPCCo one copy of records verifying acceptable completion of flushing, before testing.

1.4.1.3 Leak/Pressure Testing Records: Deliver to CPCCo one copy of records verifying acceptable completion of leak and pressure testing, within five days after completion.

1.4.1.4 Calibration Records: Deliver to CPCCo one copy of instrument calibration records five days after Contract completion.

1.5 PRODUCT SAMPLES AND MANUFACTURER'S INSTRUCTIONS

1.5.1 In addition to the submittals required in Section 01300, and the requirements of this Section, information received by Contractor (from suppliers) that document products used and how they were installed shall be delivered to CPCCo as Project Records.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION